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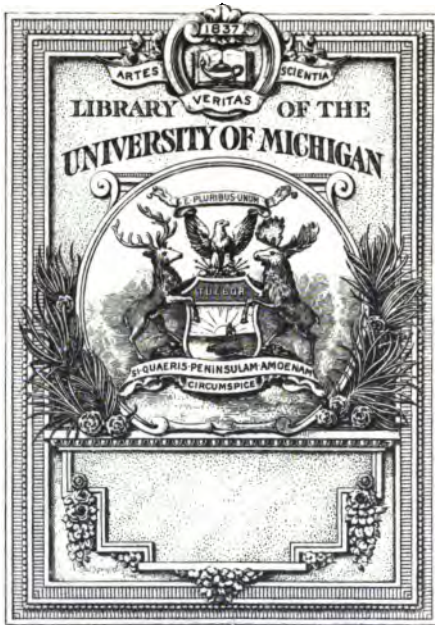
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THE IDEAL  
OF  
PERSONAL DEVELOPMENT

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# EDUCATIONAL ENDS

OR

73720

THE IDEAL OF PERSONAL DEVELOPMENT

Mrs. SOPHIE <sup>(Willcock)</sup> BRYANT, D.Sc. Lond.

MATHEMATICAL MISTRESS

IN THE NORTH LONDON COLLEGIATE SCHOOLS FOR GIRLS

'Ye shall know the Truth  
And the Truth shall make you free

LONDON  
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## P R E F A C E.

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I OWE to my readers a few words of explanation, as to the relation which I conceive to exist between psychological science and the ethical and logical doctrine set forth in the following pages.

The inquiry into educational ends, which is the object of this book, resolves itself immediately into an inquiry into the nature of that development which issues in the production of *standard* character, such character for itself being the natural ideal end of a creature that, not only is self-developing, but has ideal ends. We seek for such an *idea* of the right kind of person in process of development, as shall serve educator and educated for an *ideal* of their end.

Now, it is evident that inquiry into this idea raises all the questions of general psychological investigation, but raises them under certain limitations. It does not carry us into the study of psychology in the wide and proper sense—psychology as true for all sorts of persons—

but into psychology as true for those more highly developed persons who constantly seek, and find, the good in deed and the true in thought. Though the educator needs to study psychology proper that he may understand the uniformities and varieties of original character with which he has to do, he needs also, as it seems to me, to study apart the psychology of that type of character which grows straight upwards towards its personal end—the goodness and trueness of itself.

I have attempted, therefore, to trace in outline, as it presents itself to my mind, the line of development natural to the production of such character, and followed by all characters, more or less, as they approximate to this standard. The life-history of the standard person, as such, is the ideal of development for all persons—the idea which they should have in mind while aiming at their own improvement, and which it is very much more important that all educators should have in mind while attempting to forward such improvement in others.

This distinction, kept throughout in view, between the psychology of all minds and that of the standard mind, will perhaps explain some apparent divergences from the ordinarily accepted psychological doctrine. It would have been inconsistent with my general purpose to discuss such apparent divergences, as they arose, in the text, and I am therefore glad to avail myself of this

opportunity to suggest the limitations of view within which they ought to be considered, by those who might find in them, otherwise, a stumbling-block. This suggestion is the more desirable since, although I have not assumed in my readers a previous knowledge of psychology, I have specially had in my mind students of educational theory, for whom the study of psychology should precede all other study. With these few words of explanation, I hope they will have little difficulty in focussing the doctrine of ideal development which I have ventured to set forth with the doctrine of psychology as they know it.

Our conception of the former doctrine springs, it is evident, from our general conception of the latter. It may, therefore, make me more intelligible to my readers to tell them that the general statement of psychological principles to which I personally owe most, for the clearing up of my conceptions on the subject, is comprised in two articles on 'Psychological Principles,' by Mr. James Ward, which appeared in *Mind*. The article on 'Psychology' in the *Encyclopædia Britannica* contains a much fuller exposition of Mr. Ward's views, and is the source to which students should now be referred; but I mention the earlier exposition more particularly, first, because I was limited to a knowledge of it when I wrote most of these pages, and it is the clue to my own

development of ideas that I am most anxious, for greater intelligibility, to give, and secondly, because, from its very brevity, it is so admirably fitted to place the student at a certain point of view, which placing is the first and most important step in the study of any subject.

To other thinkers my debt is also large ; I have built, whether worthily or not, on foundations already deeply laid, having come into a common heritage of thought that cannot easily be specified in any list of names.

# CONTENTS.



## INTRODUCTION.

	PAGE
<i>THE EDUCATIONAL ENDS IN GENERAL.</i>	1

## PART I.

### *ETHICAL DEVELOPMENT.*

CHAPTER

I. SELF AND THE WORLD : DUTY . . . . .	15
II. SELF AND DUTY : VIRTUE . . . . .	29
III. THE QUEST OF FREEDOM : SELF-DEVOTION . . . . .	45
IV. THE SYSTEM OF VIRTUES . . . . .	63
V. THE OBJECT AND MEASURE OF MORAL DEVOTION : SOCIAL VIRTUE . . . . .	83
VI. THE SOVEREIGN SELF IN THE SOVEREIGN COM- MUNITY . . . . .	110

## PART II.

### *LOGICAL DEVELOPMENT.*

I. UNITY OF MOMENTARY CONSCIOUSNESS : PERCEP- TION . . . . .	129
II. ARRANGEMENT OF EXPERIENCE : CLASSES AND NAME . . . . .	153

CHAPTER	PAGE
III. PERMANENT BASIS OF EXPERIENCE : CONCEPTS AND DISCOURSE . . . . .	169
IV. THE UNIVERSE OF JUDGMENT : QUALITY, NUMBER, MEASURE . . . . .	183
V. THE QUEST OF NECESSITY : REASONED TRUTH .	208
VI. UNITY OF COMPLETE AND UNIVERSAL EXPERIENCE : SCIENCE AND PHILOSOPHY . . . . .	232
VII. THE SOUND INTELLECT SET ON TRUTH . . .	256

## CONCLUSION.

<i>THE UNITY OF EDUCATIONAL ENDS .</i>	273
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## INTRODUCTION.

### THE EDUCATIONAL END IN GENERAL.

THE educator is a person engaged in a practical occupation. He performs certain acts, and presumably he proposes to himself from their performance certain results. Whether as artist or as mechanic, he follows a purpose—if with insight as an artist, if without it as a mechanic. He always aims at some result, though it may be that the results as he proposes them are not consistent with each other, and it may be that he half forgets them often in the engrossing claims of actual routine.

The educator means to produce a result in the living material of the persons educated, and he is aware that results in such material cannot be produced mechanically. Moreover, results in any material are better when produced artistically. The educator, then, should bring to his work an insight into its nature, as every other artist does.

But this insight is a double fact. In the first place, it implies perception of the purpose to be fulfilled, in its essential nature as a series of the processes by which it is fulfilled. This is insight as regards the end proposed. Such insight is exemplified in the painter

who reproduces by a picture the psychological effects of natural scenery: he grasps, not only the total effect, but the effect in detail as a process, and he so reproduces the scene that the spectator of the picture goes through the same process of effects as the artist, though without the artist's insight into the process. It is this kind of insight at its best that makes a picture poetic, but some measure of it is required to make pictures beautiful at all.

In the second place, insight implies knowledge of the materials in which the result is wrought. The painter's knowledge of nature's forms and colours, and the possibilities of the materials in which he works, can never be as extensive as he would wish it to be. The teacher needs the same kind of knowledge respecting the material in which his ends are wrought out. Insight into character we generally call this. It is not the same as insight into the purpose to be wrought out. It is insight as regards the means to the end proposed.

The mechanic works by rules, but the artist by insight, which includes and is more than a knowledge of principles, which also includes and is more than a knowledge of scientific facts. The good teacher sees in imagination his end fulfilling itself as a living growth, and sees too the actual learner going his own way as an individual organism. No amount of mere knowledge will enable him to see these things; but a trained mind with some natural ability may see a good deal, when once it gets itself at the right point of view. It is in the way of guidance to this right point of view that one mind can do most to help another.

The teacher, as artist, must know what he is about,

and how he ought to be about it : he must consider the questions of end and of means. These two questions should be carefully distinguished from each other, since it is very easy to confuse them. The first involves an inquiry into the process by which an end is produced, the second an inquiry into the means of its production. In the latter, the query is—how can the process of production in A be aided by B?—and the answer, so far as it can be found, is to be found by studying the nature, and the laws of growth, of that A-material in which the process is to be carried out. B's qualifications for the successful pursuit of this study depend on several conditions : one of these is his degree of enlightenment as to laws of psychological development in general, and another is his skill, natural or acquired, in psychological observation. In these conditions we see the relation of education to psychology.

The question of means it is not proposed to consider further at present. Let us limit our attention to the study of our educational ends or end ; and once again it may be well to emphasise the thought that the artist's knowledge of an end is not merely knowledge of the result as finally constituted. Knowledge of the end as product includes its process of production, and clearly no one should interfere with the *natural* processes of production of human character who has not a knowledge of his end as product. The educational so-called artist who sets to work for the production of, let us say, goodness in children, content with the knowledge that a good man *is* so and so, has not an artist's knowledge of his end, and may prove to be a very mischievous

person. He must ask the further question, with the longer answer—what is goodness in its process of production, as it grows from its simplest germs to its full result in blossom and fruit?

What, however, is the educational end itself?

Since this is a question concerning the objects which men actually pursue in a certain sphere of practice, it should be answered by inquiry into the actual facts of educational practice. Care must be taken in this inquiry, however, not to make the schoolmaster everybody, or the parent either as ordinary parents go. The parent and the teacher are, nevertheless, the two most important organs of education, and if we keep them both in view we shall not go far wrong.

In education, as in all other departments of practice, we may observe development from a stage of vaguely expressed and inadequately conceived purpose to a stage in which definiteness of expression and adequacy of conception are deliberately attempted. Vague purposes of securing increased efficiency in certain departments of knowledge, or in certain kinds of ability, form the staple of first attempts to formulate educational principles. Theory proper originates later, and generally in a spirit of somewhat hostile criticism towards existing practice. The self-satisfied schoolmaster or parent is not apt to define his end: there is no need, for he fulfils it. But the dissatisfied educator, or spectator of education, as the case may be, turns theorist, and defines his end in the very act of criticising existing practice. The key-note of his complaint is always the same. This is what you mean, or ought to mean, to do, and

behold you are not doing it. He defines the end that he may criticise the means: the critical impulse is the motive. It takes more than the average tendency, even of thinkers, towards scientific analysis, to initiate an inquiry into the nature of purposes without such practical impulse of discontent at the back.

When the critic frames a definition he is likely to lapse into some kind of one-sidedness. His emphasis will naturally fall on the weak point of the practice criticised. If schoolmasters judge their results mainly by the test of information gained, without any special regard to the cultivation of faculty implied in its gain when naturally made, then the critic will define education as cultivation simply, and impeach the schoolmaster more easily, though not less surely, than he could otherwise. If the schoolmaster were to reverse his plan, or the critics to make a plan and act up to their definition, then the next generation of critics would probably find some objectionable results, make a new definition, prove their case, and criticise in their turn. Meanwhile the first generation of criticised schoolmasters might very naturally have been called *informationists* by their critics, who would call themselves *educationists* by contrast. We may imagine that these again would by their critics be called *cultivationists*. The criticism of the cultivation-theory would run on the lines of showing that a mind fixed on the cultivation of its faculties, rather than on knowledge of truth, as the ulterior aim, loses purpose and moral vigour, mere gymnastic skill and mechanical accuracy being the result. The new critics, with the errors of two genera-

tions before them, would not be reactionaries ; but, holding up the rival schools of information and cultivation alike to reproof, they would attempt to frame a definition which by going deeper would include at least the truth of both. Purely practical critics might indeed be content with a compromise, or a bare conjunction of the two ends, stating simply that they aimed at both. But conciliation is a deeper thing than this, and must be sought by closer inquiry into the ultimate meaning of the opposed propositions, with a view to tracing them to their common source if they have one, or discovering their ultimate opposition if not. In this case the task is not difficult. A well-cultivated or developed mind is one in which knowledge is latent, and constantly in readiness to be produced. A well-informed mind is one in which knowledge exists as a connected whole of well digested truth, not as a discontinuous row of mere knowledge-results. Aim at either of these desirable objects in the thorough manner that insures success, and you clearly attain the other also. The difference becomes important when inefficient means are taken to the end. Hence there is a danger in one-sidedness of view. Either the 'man of culture' who is smart but not cultivated, or the 'man of information' who is filled but not informed, emerges, and the world is all the sadder, and none the wiser, for these dreary forms of death-in-life. Of the two evils, it is worse for the teacher to be an informationist, because it is more important that his attention should be fixed on the process than on the product. But it is worse for the learner to be a cultivationist, because it is all-important

that he should keep the attainment of truth as his purpose in view. It is worse to be a 'man of culture' than to be a 'man of information;' but native ignorance is less stupid and more wholesome than either.

This example does not cover the whole educational field, but it will suffice to show that the natural process of criticism and re-criticism is a very real and good way to gain clearer conceptions of ends proposed. There is, however, another and more deliberate way. We may proceed by appreciative rather than by critical analysis. Never mind for the moment whether we do it badly or not—what is it that we all according to our lights are trying to do? We are constantly interfering—daring to interfere—with the way special children have of growing up. We ought to interfere, as we see from the results when a non-interference theory is occasionally adopted. For what purpose do we think that we are interfering, mothers, fathers, teachers, and grown-up persons generally.

There is no difficulty in the answer up to a certain point. The object of all the interference which we call education is the production of the best kind of human person possible under the circumstances. The personal material given to us varies in quality from case to case, but our central view of our duty does not vary: we have to *improve* the given person; we have to make the *best* of him, and we have to make the *most* of him.

In other words, the educator's aim is to assist the educated towards the realisation of his perfection as the limit of his better and fuller self. This involves, on the one hand, the maximum exercise, within physiological

limits, of all his natural energies, and, on the other hand, the direction of those energies into normal channels and towards normal ends. At the outset it is important to make this distinction between the *most* and the *best* use of personal energies, though as development progresses the distinction obliterates itself. The most is made when all the energies are roused, and none is contradictory to another: the sum is the greatest when there are no negative quantities. This implies a 'most' that is self-consistent. It also implies a 'most' that is not antagonistic to the external order of things. Such a 'most' partakes of the nature of a 'best,' and can only come into existence with it. Again, the 'best' is made when all the energies are directed to the realisation of some ideal, in which case it would appear that a maximum of self-consistent energy is developed; and this is the 'most.' But at the outset there is a practical question to consider. Shall we realise the best by aiming at the most, or the most by aiming at the best?

Human thought and character is not an assemblage of isolated units, but an organic system. Every new element is taken on by entering into vital connection with the old. In other words, its growth takes place round centres, not by simple addition to those centres, but by their nourishment, increase, and development in complexity. The teacher does not impart his ideas to the learner; but he supplies material for the nourishment of the learner's ideas, and can give, moreover, such a direction to their growth that the ideas grow into the likeness of his. This is one example of what is meant



by the expression 'organic growth' as applied to mind. Now mental growth being thus organic, the first condition of vigorous growth is the establishment of vigorous centres. A lively idea is an energetic purpose looked at from the other side, and an energetic purpose is to introspection a lively idea. Such an idea makes itself a centre of inquiry, and appropriates knowledge as answers to its inquiries. Inquiry is the hunger of ideas, and a hungry idea treats all knowledge-material which happens to come by, much as a hungry dog treats the scraps of organic matter which it passes in the streets. It surveys them, and selects whatever is suited to its needs. The most subtle, perhaps, of all the teacher's arts is the art of stimulating the spirit of inquiry.

Just as a lively idea is a centre of inquiry, so an energetic purpose is a centre for the organisation and stimulation of energy. Whatever will-material there is in the character an energetic purpose calls it out and appropriates it. There is an object to be gained; personal effort clearly maximises itself in identification with the purpose of gaining it. Not only is it true that union of forces is strength in this case: it is no less true that forces grow into activity with organisation. Purpose organises force and also creates it. No doubt this statement sounds like an assertion that the mind creates something out of nothing. But a fact is a fact, and this fact is a familiar one to those who pause to observe it. And there need not be any difficulty in its acceptance after all, for the fact that large stores of latent will-power exist in most persons is generally admitted. A purpose makes some of this latent force

actual. There are limits to the store, no doubt, though it is conceivable that it might be kept up without limit by material nourishment. But here we are in danger of getting out of our depth, and it is time to return to the main question.

Our notion of a best character is one in which all the energies are directed to an ideal end accepted as right; and we now see that this is the condition under which the greatest possible evolution of energy may be expected. Hence 'most' is to be gained by aiming at the 'best;' the character with most life, variety, and mass is developed in those who have aimed at the standard type.

Into the nature of this standard type it is then our primary business to inquire. The idea of it is implicit in many common modes of thought and judgment. All the conventionalities of life set up a normal type of behaviour, towards conformity with which all should approximate. In so far as behaviour does not imply character, conventionalities imply less than half the principle of conformity. Eccentricity, on the other hand, when it is not assumed just out of irritation with the mere externality of convention, implies a denial of the normal type, resulting often from the impatience of the individual to develop the most possible of himself regardless of type, he himself not being quite typical to begin with. Thus a slight one-sidedness which is innate may be the cause of one-sided growth throughout life, if not corrected by the idea of a normal type.

About the name of the standard character—the ideal of perfection—there is no difficulty. All would describe

it as the Good and the Wise. Presently we shall find that the two qualities of wisdom and goodness are different aspects—not separate parts—of the character to which they belong; that wisdom without goodness is false, i.e. unreal as wisdom, and that goodness without wisdom is mechanical, i.e. unreal as goodness. But till discussion and inquiry have revealed this unity, we must follow popular apprehension and consider them as objects of attainment apart. The distinction is founded on that of will and intellect, the capacity for producing results in doing and in knowing. These capacities do not indeed exist apart from one another, but it is convenient in some ways to consider them apart. We may assume therefore the popular distinctions between moral and intellectual character.

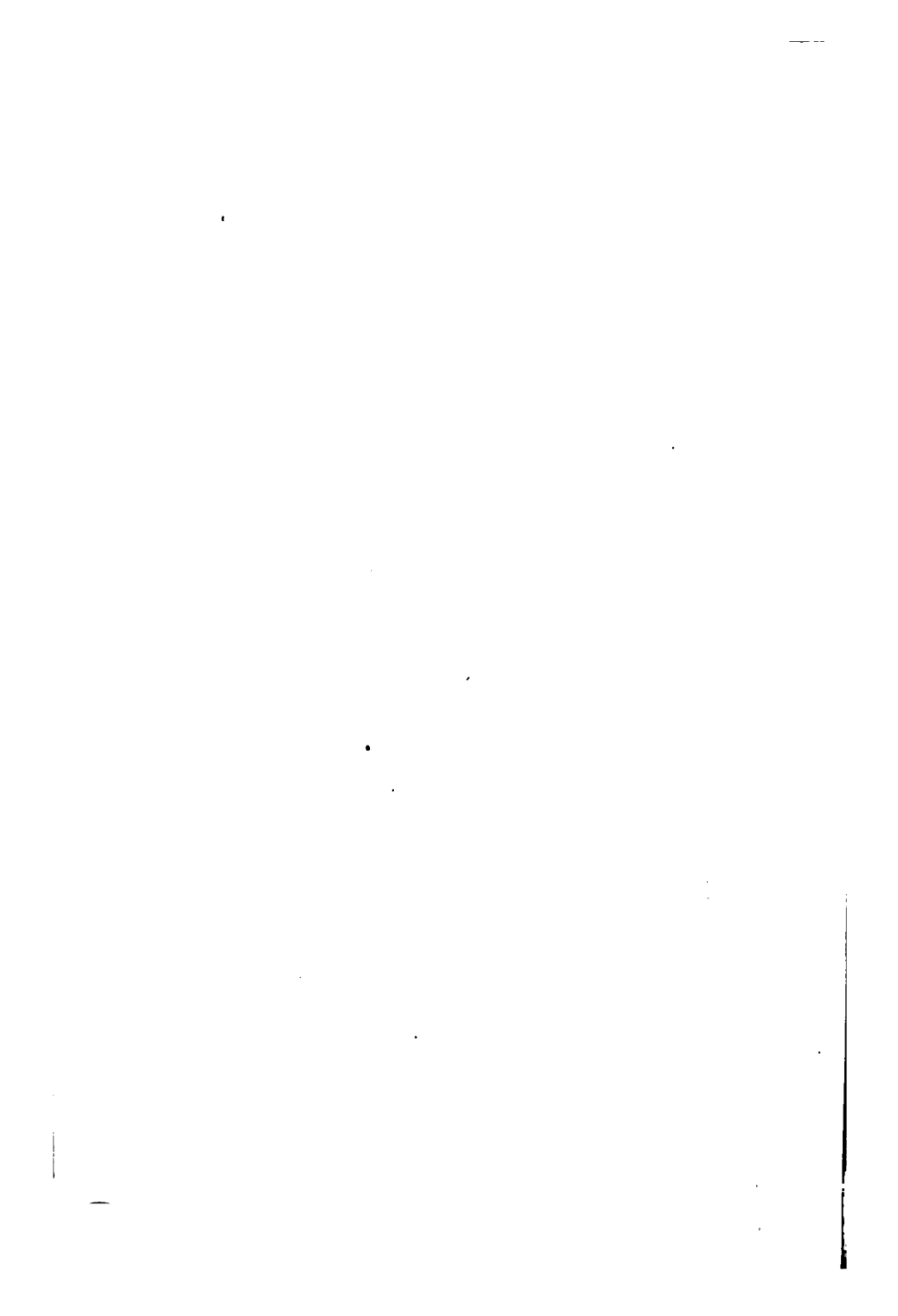
The production of moral character may be called the Ethical End of Education, and the production of intellectual character the Logical End. Consideration of the former involves Ethics, as the doctrine of the exercise of the *will* in the search for good, or the performance of duty. Its central question is—how should I do what there is for me to do? Consideration of the Logical End involves Logic as the doctrine of the exercise of the *intellect* in the search for truth. Its central question is—how should I know what there is for me to know? The production of the Ethical End is not, however, a mere question of Ethics, nor is the production of the Logical End a mere question of Logic. Character, whether logical or ethical, is more than the exercise of intellect or will respectively; there is will in the exercise of intellect and intellect in that of will. The unity of

mind should never be forgotten, while we are compelled to divide for purposes of closer study.

In its unity the educational question of end is this—How do we transform ourselves towards that type of character in which truth is the outcome of all thought, and good of all action? What is the process of the production of wisdom and goodness? And having so far insisted on unity, let us divide the inquiries.

PART I.

ETHICAL DEVELOPMENT



## CHAPTER I.

### SELF AND THE WORLD: DUTY.

THERE are two reasons at least in favour of placing the ethical inquiry first in order of time. It is, in the first place, less difficult and more interesting, because it deals with facts of character on a larger scale and as displayed in modes of action more evidently affecting the life of the actor. In the second place, the educator, though he does not always know it, has a more potent influence in moral than in intellectual education. The truth of this assertion will become more evident as we proceed. Broadly, it is a consequence of the fact that moral growth depends for food on social claims, besides being stimulated, as all mental growth is, by social influences.

There are several ethical questions to which inquiry may be directed. Much attention has been paid, in modern ethics, to the questions—what is duty, and why does any man accept it? but these are not the questions which come naturally to the front of an educational inquiry. The primary question for us at present is this;—what is good character, and what is the process of its development? In simpler language we inquire, what is it to *be* good, and what to *become* better?

Common sense and usage supply the plain, though not quite adequate, answer, that persons are good who faithfully perform their duties, whatever these may be. Looking closer we discover, in common sense also, an amendment to the effect that goodness implies a free and willing, as well as a faithful, performance, and that character is good in proportion as compulsion, by hope of reward or fear of punishment, is absent in that performance. The difference between faithful but not free performance and faithful free performance is just that which makes the difference between a clear-sighted slave and a loyal follower. The slave obeys without taking up the will of the superior into his will, without transformation of 'must' into 'will.' The follower identifies his will, as well as his act, with the will of the superior which he carries out; to him the superior is not a governor, but a real superior, whose ideas are in advance, clearer, fuller, and more energetic than those of others. As thus superior it is his function to initiate action, to lead; and it is the function of the others to co-operate and follow. This following is freedom, not mere obedience; but it does the work of obedience more thoroughly than it can otherwise be done.

The good man is the free follower of duty; and a good character may be defined to be one so controlled by itself and adjusted within itself as to adapt itself *naturally* to the claims of duty as they arise. Now we learn to adapt by adapting; already, therefore, we see that goodness takes its rise and gains its strength from the surrounding of duty in which the person is placed. All deeds to be done are, in a certain broad sense of the



word, duties, and the vigorous will puts itself out simply to do them. But the mere doing of deeds may be maleficent as well as beneficent; and the claims made upon any doer from without may be wrong as well as right. What, then, is the characteristic distinction of wrong claims from right, and what is the process by which each person for himself effects the necessary discrimination, and chooses to act accordingly? How does the vigorous will grow good rather than bad?

The last form of the question is the one best suited to the educational inquirer, and the answer to it in that form implies the answer to it in any other. If, by scrutiny of actual facts, we can find the clue to a true account of how goodness develops itself in the character of the race and of the individual, we shall find in that account a description of right conduct and righteous character, in all the degrees of which both are susceptible. Let us turn, then, to facts, and inquire how notions of duty do actually arise and grow, simultaneously with the rise and growth of virtue, as the duties are taken by the individual person to be ends into which his activity pours itself out and he is satisfied.

Each one of us is an active person tending constantly to express himself in action. Our world supplies us with occasions for activity; and our wants, including all normal desires, direct this spontaneous activity towards the attainment of certain definite objects, while experience of suffering as it accumulates deters us from activity in certain other directions. Thus desire and fear draw up between them a code of personal law for the regulation of activity. Moreover, the objects to

be attained or avoided take form to our mind as ideas suggesting their own realisation, and these pass over into constant *purposes* of pursuit or avoidance. Such an idea forms the nucleus of every definite desire or fear, which without it would be but a vague emotion tending blindly to direct activity, either as pursuit or as flight. These ideas, which suggest their own realisation, and emerge, when strong enough and with enough available activity at hand, into purposes of realisation, are presentations of a state of affairs which does not, but might, obtain in the circumstances, internal as well as external, of the person who has the ideas. Such are the ideas of a good position in life, the completed knowledge of a subject under study, or a state of character as yet unattained. In these two latter cases especially it should be noted that the idea is necessarily quite inadequate to the account that might be given afterwards of its realisation. A little reflection will indeed make it evident that a practical idea, as we may call it, cannot, at any stage of realisation, represent accurately the whole state of things at which it aims, unless it is concerned with the exact representation of circumstances that have already been experienced. This distinction between the whole aimed at and its idea is expressed by the use of the word *ideal* as denoting the whole of which the idea contains an inadequate description.

It is of the essence of human nature that it should not only desire and fear, but also purpose and plan. It expresses itself in action, not blindly when it is most human, but seeing its way in its practical ideas. It reflects itself in these, *pari passu* with its expression of

itself in action, and the resonance of itself to itself in feeling. And, by the way, the remark may be made that, as attention is claimed more or less by all these manifestations at once, the more attention at any time one of them receives the less can probably be given to the others, without some strain—ill-understood indeed—on the physiological limits. But let this pass. What we have here to notice is that practical ideas are to purpose as the eye to the hand; they contain the best account that can be given of the ends or ideals to which purposes direct action. For that reason it is often convenient, and indeed unavoidable, to use the word *end* for the idea which would be more properly called the idea of the end.

When a step is successfully taken towards the realisation of an end, as well as when the end is realised, desire so far is satisfied. Sometimes it is said that the person seeks satisfaction in the fulfilment of his ends; but it seems a truer account of our actual consciousness to say that he seeks his end and finds satisfaction also when he attains it. At least this appears to be the normal unsophisticated state of the case, though long experience of satisfactions may, under certain not very moralising conditions of life, teach a man to pursue his ends habitually with the idea, not of the end, but of the satisfaction most prominent in his mind. In both cases the attainment of the end *is* his satisfaction, and its imagined foretaste is no doubt always potent as a stimulus and encouragement.

It will now be clear that a vigorous personality needs nothing so much as material out of which to con-

struct its practical ideas. As active it requires deeds to do; as humanly active it requires objects to work for, ends to realise, causes to live, and, if need be, die for. Grown-up people often forget their childhood, and forget, therefore, the intense longing so common, I believe, in childhood for an object in life. The engrossment of selfish wants, and the pressure of petty claims emerging often from the selfishness of others—these are permitted to stifle in too many cases the normal impulse before it has time to gather strength; and a good deal of virtue is strangled at its birth in this very simple way. It is, however, natural that at least a healthy human mind should require and look about for objects in life. The educator's business is to see that this tendency has its best chance and is put to the best uses.

Each person, with his natural outlook for material out of which personal ideals may be made, is born into, and grows up in a society of other persons. From the first, his expression of himself in action is limited on all sides by the similar expression of the others. Each has some ends of his own to fulfil, and the fulfilment of these involves sundry modifications of the common world in which all live. Under such circumstances it is certain that purposes will clash: there will be a mutual interference of wills. The man, or child, is living in his purpose, and the purpose is hindered because its accomplishment is inconvenient to others. He is required by them to desist from his intentions, and this requirement he, in the first instance, naturally resents, not simply because it implies disappointment respecting the objects proposed, but because it is an interference

with what he calls his will. Resentment of interference is, in fact, of two kinds; one child is chiefly vexed at not having his *way*, while another is vexed at not having his *will*; one is disappointed because his idea, of pleasure or whatever else it may be, is not realised, the other is insulted because the output of his personality is set at nought by another person. In all cases, no doubt, these two factors are present when resentment takes place, but there can be little doubt that either may monopolise consciousness to the practical exclusion of the other. Obstinacy resists because the will is so set on an object, and generally on a particular way of realising it, that it is difficult to give the object up or even to adopt a more conciliatory way of gaining it. All the bad forms of obstinacy are, however, obstinacies about ways rather than ends. The obstinate mind is deficient in power of adaptation; it insists on going the way it originally proposed to go. The persistent mind holds fast by its central idea, but, if not obstinate, modifies its ways in accordance with circumstances. But self-will, pure and simple, is careless of ends as well as means, so long as self, the person, is the absolute chooser of both; self-will is the claim for abstract liberty. The self-willed child, as self-willed, is careless about his own way and ready to adopt anyone else's with a cheerful indifference to particulars; but he insists passionately on his right of choice, and is disposed to sacrifice indulgences for the preservation of that right. His objection is not to self-sacrifice, but to external control. Such a child, when reasonable enough and cool enough, will go out of his way—will give up

pleasure and take pains—to forestall the commands that may otherwise be laid on him. In such case other persons call him thoughtful and unselfish; in reality he is self-willed and takes thought for his dignity.

Parents and teachers much need discrimination at this point, lest they pull up the wheat of moral qualities with the tares. Persistence is good when the end is good, bad when the end is mere personal pleasure. Obstinacy is not good as a quality, though it is sometimes useful, and never as evil as the persistence of the self-indulgent. Self-will, since it attaches to no particular end, cannot be called either good or bad in respect of its object. It is the expression, however, of a great force—the force of personality in its assertion of the sole right to self-government. Power may be used badly, but power as power is always good. Let us see how self-will enters as a factor into the development of morality.

Our community interferes with us and makes claims upon us. It presents obstacles to our self-will, and thus destroys our liberty. We are subjected to commands, entreaties, expectations, directing our activity into channels not chosen freely by ourselves. Each has claims made upon him; and each desires that none but himself shall make claims. Only one solution of the difficulty is possible; freedom is obtained for each by identification of his will with the will of others. Such mutual identification of will becomes possible by the substitution of common ends for private ends in the mind of each. Self-will attaches itself, not to the particular end chosen, but to the right of choice. It is

therefore content, as self-will, to choose the common ends of the community rather than any private ends, and to express its personality actively in their realisation. The self-willed person who is reasonable enough does this, and by so doing educates himself to be in thought and feeling, as well as action, a true member of the social community. The more completely the members of the community identify their personal wills with the common ends, the more perfect does the mutual identification of will become, and the greater the total quantity of freedom in the community. Thus the claims, which were hostile to freedom, are destroyed as claims, by being accepted as objects.

This mutual identification of will is the more possible because it is in part necessary to each in order that his individual ends may be attained. The actual difficulties which encounter him in the attempt to carry out his plans are such as can only be overcome by co-operation with others. The individual attains certain of his objects best by attaining them in common with all members of his community. Hence common interests naturally arise. Aiming at these, initially perhaps for his own share simply, each learns to act with the others, and in course of time to think and to feel with them also. Thus in the pursuit of common ends for private interests there is a preparation of the state of mind favourable to the pursuit of common ends for common interests. This state of mind consists in an intellectual capacity for seeing objects of action from the common point of view, and in a moral susceptibility to the desires and fears of others. Its characteristic is

the habitual expression of other personalities in the practical ideas which emanate from our own personality, and in the total of our emotional life.

Common interests produce common action, and common action involves the whole of common life, intellectual and emotional as well as practical. Thus in a certain sense it is possible for a selfish being, with intelligence sufficient to discover the advantages of co-operation, to transform himself into a social being with genuine altruistic instincts and affections. But such a social being would still be seeking the common good only for the sake of his own share. True self-sacrifice has not so far become a fact in him, though there is now in him a capacity for self-sacrifice which did not exist in the purely unsocial stage. It is a duty, which the educator easily neglects, to see that the conditions for the growth of this capacity should be secured in the early years of child-life, although, at this period of the world's history, most have it ready-made up to a certain point by inheritance. One reason why children are so useful morally to each other in a family is that they have a common life.

The possibility of self-sacrifice becomes a reality when claims are made demanding sacrifice and are freely accepted by the person on whom they are made. If the claim be made as from a mere ruler enforcing obedience under fear of penalty, no real sacrifice is made, and no practice in the habit of preferring others to self is implied. But if the claim be made strictly in the form of duty, with an invitation to free action, as suggesting some act that *ought to be done*, then, since free choice



is possible, compliance involves real sacrifice, and practice in the habit of preferring the claims of others to our own ends is implied. This fact of freely choosing an end which was not desired by me is of the essence of self-sacrifice.

Sacrifice is possible because I can form a conception of ends devised by other minds than mine, and because I can feel the touch of pains and pleasures not my own, —in other words, because I can take an interest in other people. Sacrifice takes place because the ends of these others are presented to me, not as absolute, but as possible claims, and my activity thus invited to express itself freely in their realisation. I accept the claim as a duty when, without any question of the fulfilment of my own desires, I take it as an end for which to work. But by thus accepting it as an end, I escape from it as a claim; it was a bond, and its acceptance makes me free; self-will is satisfied by self-abnegation, and moreover the painful friction between self-regarding and other-regarding feelings is permanently diminished by the choice that results in the satisfaction of the latter.

I do not mean that duties are accepted and sacrifices made *because* the person making them *perceives* that he will thus increase his personal liberty and satisfy his sympathetic feelings. All such suppositions are fallacious, because they proceed on the supposition that individual men have reasons for every step they take in moral progress. They are the more fallacious because they insist on finding the personal reasons in the personal consequences of the step taken. In truth the metaphor of progress is misleading: there is not so much taking

of steps as a moral growth ; and in growth the consequences of each act are its causes in one sense, but not in the sense that they are the reasons why the man acts. The man acts so and so because such action is in the line of his development ; and explanation of his action consists in determining, not the reasons of acts, but the natural sequence of his life. Such explanation is useful to the educator, because it teaches him in a general way what to expect in a healthy moral growth, and the conditions under which he ought to expect it and which it is his business to secure.

The mingled experiences of a common life bring forth, out of the possibilities of human nature, a being prone to think and feel, as well as act, with others. This being is, however, essentially individual—a single personality asserting itself as free to choose, to frame its own action in accordance with its own ideas. It is also a being requiring opportunities for action—material for practical ideas. To such a being life according to duty is possible. The claims of others can be transformed by it into personal ideas of an end to be gained ; and by such transformation escape from the pressure of claims is made, and freedom—the freedom of the individual—is asserted. A more vivid personality and a more lively sociability are the joint result. Personality is enlarged and strengthened, because every duty presented makes available material for practical ideas, and every duty accepted brings about an exercise of self-will, no less than a modification of personal ideas.

This modification of ideas may indeed be very slight, only just sufficient to involve the modification of action

implied in the duty. The position in which action is wholly modified, and ideas only modified in part, is the position characteristic of the man who recognises duty habitually in the phrase 'I ought.'

The plainest and most elementary way in which duty presents itself to him is in the form of claims from the society which surrounds him. These claims are of two kinds. First, there are claims in aid of the common ends of the society, towards the realisation of which each member *ought* to subscribe his due share of effort. Secondly, there are claims in aid of the private ends of some, at least, among the other members. It should be noticed that persons are in general more ready to sacrifice their own ends for the common cause than for one another. One reason for this fact has already been indicated, and others will become evident as we proceed. It is a fact of some importance to the educator.

The claims made upon us indicate the duties we have to perform. Our duties are thus relative to the nature of the society of which we are members, and to our position in that society. We cannot transplant ourselves arbitrarily to another society, or arbitrarily choose our position in the native one. Duty means for me, in the first instance, the duties of my position; and to these I have a clue, more or less imperfect, in the expectations which others have of my conduct. If they expect too little, my conception of duty will probably be inadequate. If they expect too much, my will to accept the burden may be overstrained and break down. If they expect from me all that is reasonable

under the circumstances, my intellect will support my will in the effort of adaptation, and my conception of duty will have its full measure of development. But if their expectations are unreasonable, then I am subjected to a conflict between the social claims and the claims of reason; and in this case it is probable that either my practical ideas will be perverted from reason because I regulate my action in conformity with the unreasonable claims, or I conform with a grace so bad that I am inwardly a rebel all the time, or I may even play the hypocrite by a pretence of willing compliance when I am not willing. If indeed I have a genius equal to the difficulties of the position, I may save myself from any of these results by a dignified compliance, with reserve of judgment. But this attitude of mind is difficult in the early stages of moral growth, and a frequent repetition of the conditions which require it is certainly dangerous.

## CHAPTER II.

## SELF AND DUTY : VIRTUE.

WE have seen how the first stage of moral progress is attained by the acceptance of social claims as duties pertaining to each person's station in society. Duty is then known in its form as that which we are not compelled, but ought freely, to do ; and it is partly known to us in subject matter as that which others may and do reasonably<sup>1</sup> expect from us. Thus the notion of a right and wrong in conduct, and ideas as to the kind of conduct that is right gradually clear up and become definite. Meanwhile the conduct itself is being realised in act.

This realisation cannot take place without some influence upon personal character : each act performed carries with it either such an adjustment of ideas in the inner self as disposes to the performance of like acts, or an adjustment against their performance. If the claims presented as duties do not seem unreasonable, i.e. if they are accepted as duties, then the effect of exercise

<sup>1</sup> The idea of reasonableness is, no doubt, very vague at first, but gradually defines itself with the development of intelligence. The normal function of intelligence in early ethical development is to criticise the claims made by our society upon us.

in act will tell on the whole personality, and modify the character of its practical ideas in the direction of disposition to perform like acts. Thus conduct implies modification of character, and good conduct is a true means to the production of good character, or virtue.

But though exercise without reflection and consequent purpose is good, exercise with it is more rapidly fruitful of inner result. Mere conduct produces to some extent an unconscious adjustment of character, so that the conduct in question becomes more nearly its natural result: but reflection on the position—a round of duties to be fulfilled and a self with such range of practical ideas and habits as very imperfectly dispose it to fulfil them—leads to consciousness of the need that the self should be adjusted to the idea of duty. Adjustment to duty, or self-formation of virtuous character, becomes then a practical idea emerging in a purpose, and as a purpose it makes progress more rapidly than as a bye-result.

Moreover, as a purpose it takes up the work more thoroughly. So long as the mind is fixed solely on the performance of duty, it seems to itself free if it is self-compelled, and its growth will be largely growth in the power of self-compulsion. This power, generally spoken of as self-control, is indeed a primary virtue, but we see clearly on reflection that it is not that whole of virtue in which we can rest content. By self-control, freedom from external control may be obtained, but in so far as it is control there is a flaw in it as freedom. A man is free if he obeys himself—if he, by virtue of certain capacities in him, makes or accepts a law of duty which

he compels himself to obey. As a whole he is free in this case, it is true, but in the details of his various desires and personal ideas of action he is not free. So long as his character gives him any cause for self-compulsion, he is an inconsistent whole, a machine that does its work with much internal waste of energy ; he is free because it is *himself* that he obeys, not-free because *he* has to obey himself. It is well indeed that he should exercise self-compulsion, since this is necessary for the discharge of duty ; but it is not well that it should be necessary. Perfect freedom implies complete identification of self with the acknowledged law, whatever that law may be. If the law be that of duty, then its free adoption in this complete sense is the fundamental notion of virtue. In the state of perfect virtue, that which ought to be done is that in which the man's whole personality naturally expresses itself and finds satisfaction ; and this is perfect freedom, if that which ought to be done is truly that which has to be done. The identification of that which *is* required with that which *ought to be* required depends on the perfection realised in the community. But at present we take the community as we find it, and postpone the question of its perfection till a later stage when progress in the conception of duty and virtue shall enable us to deal with it. Normally the good man begins by respecting the community as he finds it.

We see then that there arises before the thoughtful mind the double experience of a set of duties to be performed and oneself as struggling with oneself to perform them ; and this experience of conflict suggests

the idea of its own resolution. Hence emerges the purpose so to adjust oneself in correspondence with duties that they may be naturally realised in the acts by which one realises oneself. This purpose is the formal beginning of virtue, and corresponds to the recognition of social claims as the formal beginning of duty. It aims at negating the form of duty in the more adequate fulfilment of its content. It expresses itself in the resolve—not necessarily a spoken resolve—‘I will do *what* I ought, but not merely *because* I ought,’ or ‘I will transform my will till it expresses itself in my duty.’ This purpose is, after all, no more than an energetic, reflective, and pre-eminently self-willed acceptance of the claims of duty. ‘I will be what I am wanted to be,’ is only a more emphatic rendering of the phrase ‘I will *do* what I am wanted to do.’ The real contrast is between the attitude of mind thus expressed and that which animates the phrases, ‘I will do my will,’ and ‘I will be myself.’ *The purpose of virtue is to transform character so that I may be myself in being what I am required to be, just as the acceptance of duty consists in doing what I am wanted to do as the doing of my own will.*

Before the dawn of any unifying purpose, in those for whom there is such a dawn, character is multiple, a loosely twisted rope of many strands; and every strand of character tends to assert itself in practical ideas and in will. How is this multiple personality to become virtuous? Is one of its many elements to be transformed completely and made monarch compelling all the others, or must all be transformed? The question



is already answered. The whole character must be reconciled to duty; and by the reconciliation its multiplicity will be absorbed in unity without being destroyed. Duty is the focus to which all the scattered rays of inclination and purpose converge, and their convergence thitherwards is their union without loss of beauty or intensity to any one of them.

This convergence of character towards a realisation of duty in which personality shall have full play, and the full enjoyment of that play, is the ideal of virtue so far to which our inquiry leads us. But other ideals have sometimes been hastily chosen. Let us make for ourselves, says one, a single sense of duty, strong enough for all occasions: with such a sense of duty dominant, pleasure can be despised, pain endured, and any revolt of characteristic inclinations promptly put down. Many people act on this advice, which in one way or another is commonly given. Notice the results.

The satisfaction of natural desires and the exercise of natural impulses, within certain limits, are not only pleasant but also healthy. An abrupt self-denial with respect to such desires and impulses, while they are within these limits, is, therefore, passively destructive of health; and an abrupt strain on them, without those limits, is actively destructive. The former arrests growth, the latter involves wear and tear. On the other hand, a self-denial which is not abrupt, though directed to a modification of the desires and impulses, is healthy, and has, too, a certain enjoyableness. Control of conduct in all details by a single sense of duty implies abrupt self-denials and abrupt strains. En-

feblement is the result, and so also is habitual sadness. The result of training towards this ideal is a kind of good man who has himself always well in hand, but who never flings the vigorous life of his whole personality into the discharge of duty, whose soul does not laugh and sing with the joy of conscious development into a higher personality when each good deed is done. The ideal is that of character as a monarchy in which dutiful purpose is king. In a more modified form we find it in the pages of Plato and Butler as an aristocracy in which the better motives rule the worse. Our ideal is that of character as a democracy, in which dutiful purpose leads and all the impulses follow, faithfully, freely, and finding satisfaction in the course they pursue.<sup>1</sup> In this ideal, freedom, self-consistency, joyfulness, are all maximised. Freedom of will, unity of idea, happiness, increase simultaneously.

But what is the method by which the ideal may be reached, by which such a mental condition may be brought about that the person's practical ideas shall be directed without self-compulsion to the right objects, that his actions shall be habitually taken in furtherance of those objects, and his personal satisfaction found in their pursuit and attainment? Steady *self-control* of all the activities towards the production of their right objects is the method simply. Our ideas shape themselves freely about those objects to which we have previously

<sup>1</sup> Aristotle's development of the Platonic ideal brings it into harmony with this ideal. Thus each virtue is considered to be imperfect so long as pleasure is lacking in the performance of the corresponding acts.

directed them, persistently using our first-won virtue of self-control : we learn to think naturally of the common ends as more our ends than our own, and of the fulfilment of duty as the supreme object of conduct, by so continually thinking in deliberately chosen acts of thought. I cannot choose by a single act of choice to be a person naturally virtuous in my practical ideas ; but I can choose the fulfilment of particular duties rather than the gain of private desires, whenever the opportunity of choice occurs. If I constantly do so, my mind comes to grow round the objects thus chosen ; they absorb the living energies of my personality as these develop ; and in course of time I have a mind centred, not on personal desires, but on the ends that were, or include what once were, duties. They are not duties after that : they are the objects of my desire, as well as of my purpose, in which I have lost, and, by losing, now find myself.

But it would be far from enough if we were to shape our practical ideas, as ideas only, into the image of good which duty suggests. To do this only, *when more is possible*, is to dream virtue, not to win her. Practical ideas emerge, and also define themselves, in conduct ; and the man who chooses the right objects in thought must needs choose them also in conduct. In fact, since the question is primarily of duties as requirements in conduct, the choice is made ostensibly as the choice of right acts. Hence it is a commonplace of morality, —so common that we are in danger of failing to see its full significance—that virtue is gained by practice in virtuous acts. Thus the learner in virtue acquires a habit of action—learns to be self-denying, to be brave, to

tell the truth—by merely being accustomed to acts of a certain kind.

There are difficulties at this point. Virtue as a sum of duty-fulfilling habits is one thing, and virtue as a free purpose forming character according to needs at every turn is quite another. This difficulty we must leave for the present, but another claims immediate attention. A habit may be intelligent, or it may be mechanical, just as a persistent practical idea, which is its true correlative, may be purposeful or may be barren. Just, then, as it is insufficient to cultivate right practical ideas without their practice, so it is insufficient to produce the practice without the right practical ideas. The former error children make for themselves, the latter error their educators make for them. It is essential to guard against mechanical practice, by which ways of conduct are indeed shaped, but ideas of purpose remain as they were.

Nevertheless, there is such a guarantee of actual progress made when conduct is habitually modified that we do well to approach the whole question of character-modification from the side of its expression in conduct. An act of virtue is an act of duty, and is the natural expression of virtue as a formed state of character. But the act of duty may not be an act proceeding from virtue, or even from the virtuous purpose which makes for the production of virtue. An act may follow from 'must' or 'ought' or 'will.' In the second case, which marks our present point of view, it is not an act of virtuous purpose unless 'ought to will' accompanies 'ought.' Then, and then only, it proceeds from the purpose—the

desire—to be the sort of person who naturally does right. And, since in that case the disposition to transform ‘ought’ into ‘will’ is present and is exercised, that disposition is thereby strengthened; and, as a natural co-effect, attention is concentrated on the ideas which reflect the object of the act. Thus, there is a real moulding of mind as a whole into the attitude which the act would directly express. And as the mind, by a total effort of exercise in each repetition of the act, moulds itself into this new attitude, an increasing amount of pleasure and a decreasing amount of pain in the successive acts is one mark, and the surest subjective mark, of improved adjustment. When adjustment is perfect, pleasure is at its maximum, and pain has vanished, as in the practice of any action in which one is quite proficient. Pleasure in the acts of virtue is thus, as Aristotle long ago pointed out, the test of formed virtue. But it should be noticed also, that where no trace of the pain which belongs to effort is felt, then adjustment is not being made in this effortless practice, and further growth, therefore, in virtue is not going on. The pain of effort, slight though it may be, is coincident with every voluntary alteration of the total state of mind in which one is at the time. There is, however, a certain peculiar joy in effort too—the strong man’s joy in mastery of difficulties, within as well as without; but of this there will be more to say hereafter.

In order that discipline—the discipline of act—may be a real discipline affecting character, it must not be undertaken in the mere spirit of external duty, but must be a discipline proceeding from the purpose of

virtue. How then can discipline be applied to one character by the will of another? This is the question which specially interests the educator.

In this case the act proceeds from the motive, 'I must,' and directly expresses the will of the superior who enforces it only. Has it then any moral efficacy? Yes, and no: it depends on the personal relation of influence established between the ruling and the subject mind. If the ruling or superior mind has the confidence of those which it subjects to discipline, then its commands excite the mental comment—'they must be right; this which I must do is what I ought to do, whether I must or not.' Or, again, if the person subjected to discipline has a strong self-will which resents the compulsion of 'must,' and the acts required are such as will appear reasonable to anyone who honestly considers them, then they will be recognised as those which ought to be done, whether there be any confidence in the superior mind or not. In either case the claim is perceived as a duty, and the disposition to transform a claim into a duty, being present, is *exercised* in the act. That disposition is thereby strengthened—the disposition which makes men look a claim honestly in the face, and consider, not whether it is pleasant, but whether it is reasonable. Unless discipline carry the conviction of duty with it, this disposition is not cultivated by the discipline, and no real progress is made at the time towards the condition of mind in which it is possible for virtue to become a purpose.

Even then, however, the discipline may not in the end prove to be valueless. A lesson in duty has been

offered, and, though it has not been accepted, the hard details of it, as external acts that had to be done, remain impressed on the mind of the doer. He will make nothing of them now, but he may later. They are not lost, but remain to him as material out of which he may weave his web of duty when his time of moral awakening does come at last. The bread cast upon the waters may return after many days. Men and women remember the words spoken and understood, though resented, when they were boys and girls; and they remember and understand and can realise to the full, more especially, the meaning of the acts required to be done by them when children, not for the benefit of the elders simply, but for their own good. Discipline is useful, even when it seems wholly to fail in causing self-discipline at the time. Nevertheless, its direct object is to produce self-discipline, and this should never be forgotten.

But discipline at its most effective can do more than cultivate the dutiful disposition. It may not only carry with it the conviction of duty, but it may stimulate the purpose of virtue, and infuse the 'ought to will' even into its 'must.' The really vigorous self-will accepts it thus, if at all. For the strong personality asserting freedom, there is no half-way house between rebellion against the law and self-identification with it. Compulsion is unbearable, and self-compulsion unsatisfactory. In such case 'I ought' is scarcely discriminated from 'I ought to will,' or this latter from 'I will.' In other cases, the influence of the superior may be such as to produce this attitude of mind in those whom he

commands. He is then a true leader in the full sense, inspiring, not only confidence, but the impulse of imitation: his commands are more to his followers than the statements of duty; they are directions, implicitly, if not explicitly, understood for the modification of character. An act of discipline performed in the spirit natural to strong self-will, or inspired by the influence of leader-minds, implies an exercise, not only of the disposition to recognise duty, but also of the disposition to realise virtue in acts of its kind, and to some extent of all kinds. It is an act in which there is already latent the virtuous disposition which would produce similar acts freely if it were formed.

The most successful disciplinarian is, then, the leader. It may be well to glance for a moment at his characteristic qualities. No doubt it is true that leaders are born, not made; but it is also true, though less noticeable, that many leaders are born, and afterwards spoiled, because they did not know which were their valuable qualities. The leader, like all who bear rule, must have a clear conception and a firm resolution respecting the conduct which he intends to have produced; but these do not characterise him as a leader. He must also, like all whose will appears to others as their duty, be strong in his own sense of duty, and must make it evident that his idea of duty for himself is the same as his idea for them, by applying it without flinching to his own conduct. Thus he inspires respect rising to admiration, and his will, therefore, presents itself to his followers as a will that *ought* to rule. So characterised, he is more than a ruler and yet less than a leader. The special quality of a



leader, in addition to these, is his power of *expectation*. He expects that his followers will think and will and feel as he wishes. He sees that certain deeds should be done, and he orders the doing of them by others with him, expecting that others will see them as he does. He desires certain objects of public welfare, and orders the means to their attainment, assuming similar desire in the minds of his coadjutors, similar self-sacrifice, and similar satisfaction to his own. He fulfils the law gladly, and takes their gladness for granted when he calls upon his followers to fulfil it. In a word, he is a leader because he expects that others will follow him, will be as he is, in thought and feeling, as well as in deed. He does not believe —what is not true—that they are as he is, but only that they can be, and will be if he calls upon them in the way they understand. He believes that he is, or asks them to be, what they mean to be—mean by the very laws of their nature, whether they mean it consciously or not. And in this belief he holds the mirror up to them in which they see, not their actual selves, but his idea of them as their actual meaning. He presents to them an idea of better personality for their realisation, encourages them to believe that they can realise it, and in his discipline points out to them the life by which it may be realised.

The leader, it will be evident, not only expects, but has the power of expressing his expectation. He requires that gift of expression which rouses the sympathy of others, as well as those qualities of the just ruler which rouse their admiration ; otherwise his expectation would not be apprehended by his followers as that

higher idea of themselves which works directly their improvement. Again, this power of expectation implies the possession of rare sympathetic insight, since it turns on the perception in persons of their better possibilities, as well as the possession of much loving kindness, since it turns also on a tender consideration for their true welfare and the hope that goes with love. The leader need not have so keen an eye for weakness and defect: the correction of weakness and defect is the critic's part, and concerns the teacher as critic rather than as leader. The leader's feeling for weakness turns upon his desire to show the way from it to strength, and his eye for it is mainly important in order that he may recognise in particular cases the limits of human capacity to be led.

Sympathetic insight may be replaced by typical character, of which it is indeed a fuller development. Insight can only reach those phases of character which either were or still are ideal possibilities to ourselves. It is not till we have constructed out of materials self-supplied an image of what was for us, or might have been, or yet may be, that we can see that image realised in another. Typical character is in the same line of development, further on, with that of which it is the type. The leader of typical character is directly related to his followers in such a way that their sympathy with him requires only an imaginative forecast of themselves into the best that they tend to be, and his sympathy with them requires only an imaginative effort in the opposite direction: they see themselves in blossom and fruit; he sees himself in germ or in earlier stages of development. It is because of the influence of typical character in

leaders, that members of another nationality are apt to be at a loss in the leader's place.

The leader who, not having typical character, depends on sympathetic insight has considerable difficulties. He is not in the direct line of development with his followers. He has to re-cast himself in order to construct an image of character corresponding to any one of them. Moreover, with the common character there goes a common language of expression in which character expresses itself. Without the common character the untaught leader cannot read this language in his followers, or reads it wrongly. He has to learn it, almost as a foreign language. If these difficulties were overcome, there would still remain the more serious similar difficulties on the follower's side. There is a gift for following as there is for leading, and without typical character it depends, as leading does, on sympathetic insight. The follower must be quick at learning the leader's language; he must be ready to see that certain modes of expression which he uses for one state of mind his leader uses with a difference. Again, he must possess some imaginative skill, because he has, out of the hints which a good leader will abundantly give, to construct a modified image of his possible self. The leader is good, from this point of view, in so far as his powers of expression are such, and his insight is such, as enable him readily to express himself, or the modified self which he presents to his followers, in a language which they can readily understand. A teacher is, for the time being, the leader of his class; and in a French or German teacher managing a class of English boys we

have a familiar example of the leader adapting, or trying to adapt, himself to his followers.

So much for the functions of discipline in general, and of the leader, who is the best administrator of discipline, in particular. In a certain sense, this has been a digression from the main line of inquiry. We were supposing that the purpose of virtue had arisen, and were inquiring into the process by which it realises itself. On the outside this process is the activity of good conduct: to the intellect it is the activity of ideas, first in subordination to the notion of duty, and afterwards in freedom as directly chosen for its own sake: for the emotions it is a course of life which pleasure and pain do not control, but which results in the gain of new pleasures and the loss of old pains, while all the time there is an undercurrent, which they disguise but do not conceal, of personal gladness concurrent with the steady exercise of the self-asserting will. Self-discipline we have seen to consist in the voluntary subjection of self to this process; and it is carried out by directing the conduct to right ends, the ideas to right objects, and by training the emotions to accordance with the production of these ends. Self-discipline is probably applied with most effect through the discipline of conduct; but thus applied it does not produce virtue unless, sooner or later, the ideas form themselves in agreement with the conduct, and the feelings are transformed by new growth to echo in desire the acts and ideas of virtue. And the condition that these results shall follow is the general condition of growth—whatever activities are exercised in the discipline, these grow.

## CHAPTER III.

## THE QUEST OF FREEDOM: SELF-DEVOTION.

So far we have considered the general nature of personal development in virtue, within the limits and by means of the claims imposed by the community. This development is effected by a process of adaptation to the social environment, which, on the inner side, is formally characterised by such modification of character as shall enable dutiful conduct to be undertaken freely; and in this modification the various strands of character are wrought into one consistent whole with duty as purpose. Thus, freedom fulfilling itself in the presence of duty, unity is attained in virtue.

But this is not all that is contained in the possibilities of the person to whom this is possible. Character, as we have seen, is a product of growth. Ideas, habits, and feelings grow in accordance with duty when the ideas of duty are constantly before the mind; and the maximum of personal freedom is attained by such growth—freedom from the claims without and their reflection in the idea of duty within. Let us now put duty and the idea of duty, so familiar to our modern notions, aside, and consider how the same living per-

sonality would grow without attention to it. Suppose the conditions of life the same, but the phrase 'you ought' to be never spoken, or at least never attended to.

There would still be life, and therefore growth; and the growth, being growth of character, and human, would be self-conscious as before. Practical ideas would be formed, and conduct would be directed to the attainment of their ends, while desire would attend the ideas, purpose the efforts made, and satisfaction would follow the successful attainment. In each such complex experience there is a complex act of exercise, and thus the basis of a complex feature of character: old ideas, old activities, old feelings become stronger, new ideas, new activities, new feelings come into being. This is self-conscious growth: it originates in, or is accompanied by, the rise of a practical idea from materials already present to the mind, and is effected by the total act of exercise which culminates in the realisation of the idea.

As we have already observed, the formation of practical ideas is dependent on the supply of material out of which to form them. In the question of the holiday-maker, 'What shall I do to-day?' or of the boy, 'What shall I do with my life?' this need is very simply reflected. The simplest answer to the latter question is 'Do your duty,' and we have already considered how that answer is given, and in a general way is found acceptable. Indeed it is probable that failure to accept duty, under tolerably favourable circumstances, might be commonly traced to the inveterate laziness shown in absence of inclination to ask this

question. Those who desire a wrong sort of life present difficulties to the educator, but those who have no desire for active life at all are not far from being his despair.

Practical ideas of ends to be pursued may be distinguished as of two kinds. A man may construct them out of previous experiences in which he found satisfaction—experiences pertaining either to his private or his social life—and on the pattern of those experiences; or he may construct ideas of ends to be pursued surpassing all his past experience, though no doubt his materials are drawn from that experience. His conduct on the first supposition will tend to reproduce certain portions of his own past, or the past of others as he can imagine it; he seeks for a life which he knows, and in which, as knowing it, he expects satisfaction. His conduct on the latter supposition is directed to the production of a life like the past to some extent, but different too—the past with modifications. In his practical ideas generally, there are found mingled elements from his own experience, and elements appropriated from the general experience as he can imagine it, and all these are united with an expectation that in the fulfilment of the idea a new experience will be found, a modified state of his present being, different from any state in the past.

This element of expectation, this longing for the new in life, is the principle of growth as reflected in self-consciousness; the ideas into which it enters are those by the pursuit of which personality becomes transformed from one state of character to another. The

latter state is conditioned strictly by the former, and by the circumstances under which growth takes place; because the content of the practical idea, the pursuit of which is the act of growth, depends upon the ideas possible in that state, and upon the influences which awaken certain possibilities rather than others. But the whole process exists, because life puts itself out in growth, of which we are conscious—intellectually as an expectation, emotionally as a desire, volitionally as a purpose after new life. The educator can fashion circumstances, and thus mould the possibilities of character-development. Can he do anything to increase the vigour of growth on which after all most depends? If not, he can, at least, abstain from hindering it.

The desire for new life is seen in its more commonplace manifestations, and as it were at play, in the desire of over-well-to-do people for variety and excitement. Here we have the principle of growth asserting itself under circumstances which prevent it from taking its normal shape of purpose to be or to do something definite; it means nothing, but is still active, and this is what I mean by saying that it is at play. The longing for life—more life—spreads itself out anyhow rather than not spread at all. When the resources of play are exhausted, and there seems to be nothing new under the sun, then the outlook becomes indescribably dreary, and the victim—not of indolence but of purposelessness—is said to be a prey to *ennui*.<sup>1</sup> All the objects of life have been used up as mere sources of variety; and their

<sup>1</sup> There is an excellent illustration of this in Miss Edgeworth's tale of *Ennui*.



supply of variety was the sole available source of that new life which life desires. Play is all very well in its way, and this kind of play is as well as others; but a character nourished on play is not the character in which we should expect to find either moral excellence or personal contentment.

We have glanced at the principle of growth in its play; let us look at it now in its work as regulating our ideas of ends to be pursued. In their first approximation, these ideas rise up to us out of the dark of unconsciousness qualified altogether by our intellectual experience and our voluntary habits—in other words, by our formed character. If we accept them finally in this condition and act accordingly, then they are ideas of the first kind, our conduct is the simple expression of our character, and this is not modified—we emphasise ourselves, but do not grow. Much conduct is of this kind, and more of some persons than of others. On the other hand, we may take the idea so qualified as an approximation to our meaning only, and qualify it further as we carry it out. The sources of qualification are no doubt in us originally; but they are latent, and we develop them, not merely as circumstances direct, but from ourselves. We call upon ourselves, demanding a more complete awakening of self-consciousness in this act than ever took place before; and the awakening follows. Thus the act is qualified by the development of latent character into potency, and the character is modified by the development required for the qualification of the act.

The principle of growth thus shows itself in action, as a principle of qualification applied to the conduct

which naturally expresses the character as it is, and as a principle of modification applied to that character. How does it appear in the consciousness of the person whose conduct and character are thus affected by it?

It appears to him as a part of his personal consciousness, and as the part which is most peculiarly himself perhaps, which enables him to set at nought the needs and desires of all the rest, and choose not wholly to fix his attention, or direct his acts, where his ideas point: it is *himself as a power of denial*. In other and more accurate language, he is aware of a tendency in him to deny that his acts, whether external or of thought, are purely the products of his previous acts as registered in formed ideas and formed habits of action; and he is aware also of an impulse to assert this denial that he is the resultant of his character, by being on each occasion something different. He is aware of an impulse to set himself free from himself, the first-named 'himself' being the whole of which the second-named 'himself' is the developed part. This impulse is the act of growth conscious of itself, as rescuing the 'more' that is to be from the 'less' that already is. It is at the core of our ideas about human freedom. Living growth is a free causation, a caused freedom: a growing personality must be aware of freedom—is free; it is a growing personality because it is free, and it feels itself free because it is a growing personality.

But let us mark well how this self-liberating impulse asserts itself for a single personality: it asserts itself by denying, and can do so in no other way, because it has no content—no idea—and therefore cannot affirm

anything. It denies of each practical idea that the whole intended is expressed in it; and thus implicitly it does assert of the idea that it means something more or better than it is. It denies that the present state of its person's character is adequate to the person; and thus implicitly it asserts the latent existence of a more adequate or better state, and impels towards its realisation. Denial of that which already is, withdrawal of full support from existing forces—by these acts the impulse of self-liberation blankly asserts itself. Thus the way is cleared for the reception of new suggestions, either from without or from within, and this very simply. Attention is partially withdrawn from the present contents of consciousness—ideas *felt* to be inadequate and unsatisfying—and thrown into the attitude of expectation. Thus the mind is prepared for the reception of additional ideas, and does not let them pass when they come. By the denial of present claims, future claims have secured to them a chance of attention. The mind withdraws itself from its character, and demands a further development of character with which to identify itself. And it is because it necessarily identifies its *effort* with that which is not yet, rather than with that which already is, that we seem so peculiarly to be asserting ourselves when we deny ourselves. Moreover, this act of denial implies the possibility of a new self-assertion, by the identification of self with objects outside self.

We are concerned just now more especially with the development of character in relation to conduct than with its development otherwise. We will therefore content ourselves with consideration of the conditions

under which this impulse to liberty works in the practical sphere. I assert myself as free from the control of my own ideas and my own habits in act. This I may do wantonly and without purpose, merely as the seeker of new deeds and new motives passing with the deeds. If so, I make for myself a new kind of slavery, the slavery of perpetual restlessness in this search. Of this state enough has already been said: it is the result of blank denial, without the affirmation, implicit in the normal condition of growth, which only denies the present state as inadequate to the whole that might be. Such blank denial is not the assertion of freedom, for this implies the notion of a person who asserts himself by being free. In asserting myself as free from my own control, I do so normally with a view to being more myself than I am. For this I need an aim; I realise my fuller self, if at all, by a pursuit of objects which calls for its development and in which, therefore, I am satisfied. Life faints without an object in life.

The objects in which I realise myself have to be found by me, and it would seem that they must be found in the ordinary experimental way by a process of trial and error. I take such new objects of conduct as suggest themselves, and continue to pursue only those which are found to satisfy me. The new satisfactions which I find in the pursuit of new objects are the subjective mark of new developments in me; and they are its consequences, not its causes, though they have a natural tendency to cause persistence in the pursuit of the objects to which they attach.

The growing personality demands, then, above all

things, objects in the pursuit of which it may find new developments of itself. It turns itself towards the world expectantly, ready to make trial of new pursuits, if they do not involve too great a breach with its already existent character. For growth is conservative as well as progressive; the past is not despised, nor the present wholly rejected, in the impulse to pass beyond them into a wider future. In growth nothing is destroyed, except the barriers to growth. Hence, we see how natural it is that the mind should reject the idea of an end which does violence to its present constitution, and should refuse an act that presents no point of unity with its habitual ideas. But it will, and does, throw itself into acts which express its ideas and something more; and, by so doing, it begins to become the something more.

In the world it finds the objects of its something more—in the natural world to some extent, and still more conspicuously in the social world. Deeds to be done, and thoughts to be thought, surround us—sometimes too many, and then we are apt to become bewildered and our growth unsteady, or we may sink into the apathy that follows distraction and not grow at all—sometimes too few, and then we either sink into the apathy of indolence, or fall into the fever of unrest longing always for more deeds, more life—sometimes, for the happy few which the progress of education will yet make many, there is just the adequate amount. We put forth our energies to do these deeds, and awaken in ourselves thereby the motives that naturally impel to them. But we do this only if there is already some affinity between the deeds and us: we make ex-

periments, indeed, but we do not generally make leaps quite in the dark, and still less do we habitually contradict our present character by our act. We may do these things, no doubt, but the doing of them would seem to be abnormal and not in the way of healthy growth.

Since society supplies largely the means of growth, it is evident that growth tends to take place on the lines of the social nature. Man becomes more of himself by self-identification with his society; his necessary food for growth in new ideas he obtains by absorption from other minds in a common life of deeds and thoughts. He does social deeds; and, thus exercising his social motives, he comes to take social rather than personal ends for his objects of pursuit. These are the ends which we have considered as duties in the last two chapters. We see now that it is natural for them to be taken freely as ends by the individual, without a preliminary stage in which they are taken as duties. It is in the line of his normal development that they should become his natural ends: *without the law he may become a faithful doer of the law*, and as free as he is faithful. It is his end all along, as a person freely developing himself, to transcend at every point his present self—to pass out of himself into a life that is more than his own. This end must appear to him as a life that he lives, not for his private ends; but in stretching towards the goal of such a life, he transforms his private ends into conformity with it so far as already realised. He lives above his own range of selfish and habitual interests; and, by so living, he raises those interests to the level of his life.

And to this process of living in ends that transcend

self, and bringing self up to the level of consistency with them, there is ideally no limit. On the subjective side it involves the satisfaction of two requirements which lie deep in healthy human nature—the requirements of liberty from self and harmony with self. This latter is, as we have already seen, another aspect of the demand for a fuller liberty—that liberty of character from the government of the ruling impulse which is effected by identification of character with it. Thus liberty culminates in unity. But the new unity so formed sets up a new demand for liberty. As going beyond the present of actual desire, whether based on private or social motives in me, the impulse to self-liberation cannot find, or allow me to find, full satisfaction in any *state* of my realised character however exalted. A new and higher state is a new possibility of bondage after all: from this state, as from those that preceded it, the growing personality still sets itself free. It is not fully satisfied in any satisfaction as a state, but takes all its satisfactions as stages only in an ideal movement that has no end—an infinite progress towards an end that, in the strict sense of the word, is infinite, since every state that can be conceived must, in its very character of state, fall short of it. We may speak of it, in mathematical language, as the *limit* of the progress towards it, the state of character to which in all our development we approach ever nearer, and which no state actually attained can ever surpass. This limit is *the ideal of perfection, as a completely developed whole of active and self-conscious human nature, perfectly consistent with itself, and having all its energies of action,*

*thought, and feeling so directed to an object outside self that by life in that object it is free from itself.* Without this last condition the ideal of perfection would imply mere automatism—loss of free movement among the parts of the whole,—and the limit of growth would be the loss of life.

Life, then, apart from growth, implies concentration on an object surpassing self, an object to which the growth of life is never adequate, but towards which it must clearly point if the idea of human perfection, with which it is focussed, is not to include loss of the freedom that is life. And with this concentration on an object adequacy to which surpasses the limit of human perfection, there arises the idea of a personality perfect beyond that limit of perfection, but yet along the line of its development. This idea of superhuman or divine perfection is a necessary idea to us, as persons who seek our own perfection; because our search for perfection implies, among other things, concentration on an end to which we are not adequate even in our perfection. We seek our own perfection most effectively by looking towards this ideal perfection, purposing to live, so far as in us lies, in accordance with the will that would emanate from a person so ideally perfect. Thus it is that virtue presents itself to the religious consciousness as voluntary submission to the perfect will, with such an uplifting of character towards the perfect character as is humanly possible. The limit of the human development which is carried on by the voluntary search for more and better life is not most effectively approached by direct aim of the ideas towards it. Such direct aim



at a full development of human possibilities tends to result in the attainment of a dead, instead of a living, perfection. If the limit is to be reached with energies of living movement all intact, the aim by which it is approached must be an aim directed beyond and above it.

Here we see how the moral consciousness, so far as it reflects the facts of personal life, merges in the religious consciousness, as reflecting the conditions under which personal life can develop towards its best. The key-note throughout is life towards an end beyond self, and towards conformity with a Being that surpasses the limits of human perfection.

Practically, this life has to be lived under ordinary human circumstances, in the face of nature and of society. The end beyond self which naturally suggests itself is the good of the community. If this end approve itself as consonant with the full demands of personality, then it will be chosen as the best available end; and in so far as it is at first vague or inadequate, its idea will afterwards be expanded and defined to meet growing requirements. All we need consider initially is this:—first, whether it is an end in the idea of devotion to which we can find realised, that requirement of a being perfect after its kind, absorption in an end passing self; and, secondly, whether it is at the same time an end really forwarded by such absorption of personal energies in its service. It is at once evident that the idea of the common good fulfils these conditions on one supposition: the common good must needs be conceived as an end in furtherance of which the *perfect* man could find satisfaction. This requirement may furnish hereafter some clue

to a definition of our idea of good. The ends which, meanwhile, we take from time to time are regarded by us as means towards that end of ends which includes the greatest good for each and all, but of which our conception is always inadequate, as we necessarily assume it to be adequate to the nature which transcends the limits of our own perfection.

Let us try to see the matter a little more closely. We desire an object in living for which we may freely realise ourselves, and might still be free when realised. Such an object must surpass our perfected capacities of comprehension and desire. So far as we can conceive it in relation to our own personality, we necessarily conceive it as exactly adequate to a personality whose perfection surpasses ours, and whose will is expressed in the pursuit of this object, the pursuit of which for us is the means to our perfection. As the means to our perfection, this pursuit is the fulfilment of our best selves, and is, or reflects, the natural law of our true development. As expressing the will of the higher personality in subordination to which we bring our own best personality into existence, it is conceived as the prescribed law of duty, pointing out to us what we ought to do if we would find the salvation of our own true life. *The pursuit of the Right Object is Law in both phases of the word's meaning: it is the condition of development in the natural sense; and it is the imperative of duty which we recognise as laid upon us by wisdom and power superior to our own. As self-conscious beings the fulfilment of the natural law in us is effected by our recognition of it as an imperative which we ought to fulfil.*

So the ideas of Law, Duty, Right Object, rise up in our consciousness, and make themselves ever clearer and more powerful the more we attend to them. But so far we have considered them as formal ideas; we need now to see how they come to have content, and what content. This is supplied, as already remarked, by the community in which we find ourselves. The community makes laws and prescribes them as imperative—i.e. as duties. The formal notions of Law and Duty, which originate in the personal consciousness, assimilate the matter of the social laws and duties, giving them the sacredness of the personal sanction, and becoming filled with their content. Thus, social law—and, indeed, natural law also—are accepted by the religious consciousness as expressing the Will of the Ideal or Divine Person; and when reflection on the object of conduct takes place, the social object is necessarily conceived as identical with the right object, and its attainment as the Will of the Divine Person and Lawgiver. The social object is seen, on reflection, to comprise a variety of ends in each of which the welfare of the community is more or less defined: it is conceived, therefore, in a general way to be the good of the community—our own community, as in different stages of civilisation we may differently define it. This common good is the object which we ought to pursue, and which we therefore conceive as the natural object of desire of the ideal person, and the object of desire to the level of which we seek ever to raise our own characters. Ideal personality and the good of the community are, at this point of reflection, seen to be reciprocal ideas mutually defining each other:

the content of each must be such as to render it adequate to the formal law of the other. The ideal person must be conceived as equal in range of ideas and desires to the good of the community. The good must be conceived as a good that would so appear to the ideal person—as a good of persons, and their highest good. But the fulfilment of this mutual qualification needs discussion in detail. It will be sufficient now that we should notice the correlation of ideas which is the source of systematic morality.

We have inquired into the notion of duty, and find that it implies the idea of a person freely substituting its claims for private ends, and transforming himself into the image of virtue by the substitution. We see that, to the person who can do, this freedom is an object. We have now inquired further into this demand for freedom, and find in it the self-conscious impulse of personal growth. And, in the last resort, we see that personal growth implies the search for duty, in the fulfilment of which higher life is realised. *So it appears that self-conscious life demands duty freely, as the law of its true development, even though no obligations and claims should be laid upon the person from without.* Moreover, these claims and obligations are accepted as duties because they are the opportunities in which the personal demand for duty can satisfy itself; though the pressure of them as claims does, no doubt, accelerate the inner movement, since freedom from that pressure is gained by accepting them as duties.

In so far as, taking the social ends for my ends freely from the first, my nature adjusts itself to them

without the use of a special purpose of adjustment, my growth in virtue is to the full a natural growth; it is the free growth of my personality. The idea of duty will in this case come to me only by close reflection on my moral consciousness, or because of special difficulties, involving conflicts, which require for their settlement the appearance of the idea. Up to that point I become the faithful and free performer of duty, without any need for a sense of duty to help me.

If, to make an impossible supposition, human character had in all persons continued on a level of simultaneous development, and if, also, parents had scrupulously refrained from hastening, or in any way interfering with, the development of their children, all moral growth would have been of this type. But let one man arise with a more intense desire for personal realisation, or a more adequate view of social ends, than the others, and we have the moral teacher with his 'thou oughtest,' or the legislator with his 'thou shalt.' Henceforth, there are duties, proclaimed as duties, for all lower down than the highest; and there is duty most of all for him, since he has become its exponent to the people.

The tendency to search for a higher personality than one's own comes into play at this point. The inferior persons recognise their superior, and yield themselves readily up to his guidance, thus finding a better self in themselves. And the superior is stimulated by contemplation of the ideal self which his followers see in him, and to which he knows himself to be as yet inadequate. Their belief that he is the superior acts on him just as we have already seen the leader's belief in his followers

to act on them. It strengthens his resolve to be what he means himself, and is meant, to be. This is perhaps the reason, why on the high moral levels, where lower motives are out of the question, the desire for a follower who finds his good in oneself is only second to the desire for a leader in whom one finds one's good. Both are natural forms of the desire for the support of companionship in moral growth, and, perhaps, in perfect moral health there is an equal desire for both kinds of companion.

## CHAPTER IV.

## THE SYSTEM OF VIRTUES.

Two facts will now be sufficiently evident as opposite aspects of the one central fact of human life. On the one hand, we see that the self-conscious adaptation of personality to environment is effected by the development of a free and harmonised self, freely taking the ends naturally realised in the environment as its personal objects of pursuit. On the other hand, we see that the development of the free self-consciousness which we call personality is effected by the constant pursuit of an object surpassing the present capacities of private desire, conceived as the object that ought to be pursued, and identified with the ends naturally realised, or sought to be realised, in the environment. Thus adaptation implies growth, and growth implies adaptation; each is the same fact as the other seen from the opposite side; adaptation is the outer side of growth, growth is the inner side of adaptation. Both are caused by, and also cause, life.

Life is thus towards the realisation of an object. This object, again, may be viewed under two opposite aspects. As the object of growth, it is the realisation

of personality, in a perfectly developed, harmonised and, still in its perfection, freely moving self, with an ideal beyond itself towards which it *moves* by living for an object outside itself which it *serves*. Without interpersonal service, the limit of personal growth would be death, not life. On the other hand, as the object of adaptation, it is the realisation of ends common to all persons forming the community, and it is subject to the conditions imposed by physical law; and clearly, since this common end is an end for persons, our common idea of it will expand as the persons' ideas of their personal ends expand with their growth. So it appears that, while the personal end is *realised* by devotion of personal energies to the common end, the common end is *understood* by reference to persons' ideas of the personal end. The man who, in his pursuit of the right object, reflects upon it in its aspect of service only, and without reference to it as the object of personal growth, will, therefore, be unable to conceive of it rightly as the service of persons with personal objects similar to that right object of his own on which he does not reflect. And, similarly, the man who pursues it, consciously, as his own perfection only, (in that spirit of Greek ethical reflection which is foreign to the modern idea), misses the essential means to its attainment in life beyond self through service.

We can now define virtue from this dual point of view more precisely than before was possible. *Virtue is the characteristic of persons who are finding their perfection, by the unwavering pursuit of those objects which further the perfection of the community.* Virtue



is essentially not a *state* of character, but a *directed energy*—a force that takes character straight to its proper end by the proper means. If we are asked to define further these ideas of personal perfection and the perfection of the community, our answer is that they define one another throughout the whole course of moral progress: all that each person has to do is to pursue for the community that idea of good or perfection which he already realises for himself; and as his idea of personal good grows with the pursuit his idea of the common good will be modified. Each begins to pursue the common good as he can understand it; he seeks to supply opportunities and to cultivate tastes which he knows to be good; and, gaining new tastes and new knowledge in the pursuit, his idea of the object to be gained is modified. Moreover, he and all inherit the gathered wisdom of ancestors, who have bequeathed to us a general notion of the common good; and wise men use this to modify their own notions of what is best for all.

But the name virtue is also used in another sense, and this ambiguity is the source of certain confusions in thought. We speak of virtue as that state of formed character, so far on the road to perfection, which is adequate to the duties of the person whose character it is. More accurately, such a person exemplifies morality rather than virtue. In such a one there may be little of the eager straining forward towards higher life which is the essential mark of the 'bettering' process; and virtue is the disposition to grow better by doing right, not simply the disposition to do right as one is. The

dullness which is so often ascribed—in fact and in fiction—to good people is a result, not of their goodness, which presumably in such case is mere formed or statical morality, but to their defect of goodness—their lack of the dynamic impulse of virtue to grow better, by taking up new duties as they come, or seeking them if they do not come. Persons fail to be interesting if they are deficient in life; and virtue is life with purpose to do right, and be true to oneself, though the skies of self-interest should fall.

This is virtue in the most essential sense of the word, and it is what Kant calls the good will. With him, indeed, all the emphasis is laid on the idea of the good will as a fixed purpose to fulfil the imperative of duty; and he leaves us with a certain sense of hardness and joylessness in our ideas of his good man, very different from that which attaches to our idea of a freely growing personality, adapting itself to difficult and even self-contradictory circumstances, with the easy grace that comes of gain, rather than loss, of personal dignity under difficulties. The difference turns upon the contrast between life in subjection to a purpose, and life by means of a purpose—between myself submissive to duty, and myself in duty. Kant, however, points out clearly that the essential characteristic of virtue lies in rectitude at the *growing-point* of life and character—the will directed constantly in right ways. Using his language then, we may say that the good will is the primary virtue.

The good will operating on any given character produces under all circumstances certain general dispositions, besides special changes of disposition under

special circumstances. These dispositions of character are exercised in every deliberate exercise of the good will, and appear, therefore, as the background of all virtuous conduct, and of all virtuous growth in character. They might very appropriately be called the cardinal virtues, and are, at once, the details in which the good will makes itself manifest, and the first fruits of its exercise. They are also, as we shall see presently, the formal dispositions which take up the work of the good will on the lower planes of conduct and character, leaving its energy free for new and more difficult performance.

Every exercise of the good will is a practical affirmation of faith in its efficiency to produce the conduct, or the change of character, which it purposes to produce. It denies the suggestion that the acts proposed are beyond the limits of the doer's strength. As so doing, each act involves the exercise, and therefore the growth, of ethical self-confidence, or faith in one's own virtuous possibilities. And this is the first cardinal virtue—a virtue of which popular moralists are apt to take too little heed—the virtue of faith in the possible good self. This virtue is indeed reflected in the religious consciousness very clearly, as faith in the divine grace by which the personal effort of the faithful is able to surpass its own efficiency. But the unnatural breach that has been effected in the minds of so many between the natural moral and the religious consciousness too often prevents religious faith from becoming practical in personal regeneration—which must be a self-regeneration—from showing itself as faith in personal efforts rightly directed to the production of better life.

Every exercise of the good will, however, falls short of its entire purpose, if the will be good in the fullest sense, and this shortcoming as perceived and felt is a stimulus to further exercise. In each act of its exercise there is exercised, therefore, the habit of perceiving the inadequacy of act to purpose, the critical eye for the feebleness of actual performance. This habit of contrasting the actual to its disadvantage with the possible that ought, and is meant, to be, is ethical humility. Unlike the first named virtue, of which it is the complement, this virtue is much esteemed in popular morality; but it is liable to a serious amount of misrepresentation, which destroys its moral value as an efficient factor in the 'bettering' process. As taken up into the religious consciousness, humility is the attitude of mind which accompanies the perception that the human perfection possible to oneself is, after all, inadequate to the ideal perfection which the production of it implies. After we have done all, we are unprofitable servants. In this expression of dissatisfaction with the best that we can ever do, we have the attitude of religious humility almost exactly defined. Now the error to which popular morality is so liable, (and which results from the artificial breach of continuity already noticed between the religious and the moral consciousness), consists in losing sight of the human perfection, which is possible, and to the production of which the faculty of humility should be subservient. It is one thing, and not a very stimulating thing, to say, I am a miserable sinner compared with the ideal perfection which is beyond the limit of my

highest development; and it is a very different thing to say, I am a miserable sinner compared with the possible self that can be developed in me by me. The one suggests the attitude of a man who refuses to climb the mountains of earth because he cannot thus reach the sky; the other suggests the man who looks to the skies indeed, as defining the mountain tops, and making the prospect of their heights a prospect of light and freedom with room for life beyond, but who compares his station, not with the sky, but with the mountain top. The genuine humility which has moral worth, as serviceable to the ends of the good will, is practical as well as contemplative; it combines a true perception of the relation between the actual state of moral character or conduct, and the relatively perfect state possible to human personality, with a further true perception of the fact that this perfect state falls far short of the absolute perfection which we assume so far as we can in idea conceive it. Humility of this complete kind is practical in respect, more especially, of its first named qualification as ethical humility, and stimulates normally to further effort towards better life, if the complementary virtue of ethical faith be not lacking.

That these two virtues of ethical faith and ethical humility are complementary is sufficiently evident. Faith we see as the creative, humility as the corrective and regulative, energy of the moral purpose to better life; faith initiates, humility criticises. And evidently the moral energy of particular persons may come to be unequally distributed between the two. Indeed it is probable that in most cases where the two are perfectly

balanced, one had more native strength and the other has been more deliberately cultivated. As a matter of fact, it is easier to cultivate humility than to cultivate faith, just as it is easier to criticise than to create; and this reflection points to the further reflection that when the self-confidence of faith shows itself in the crude, and perhaps disagreeable, forms of childhood, we should think twice before we treat it disrespectfully.

It is not so evident that these complementary virtues start from a common stem of thought as well as of purpose, and have a common intellectual character, despite their difference. Faith implies the perception of possibilities, humility is cognisant of things as they are; in each there is manifested differently the single quality of faithfulness to the truth of one's own personality. Both are forms of the purpose to be true, and diverge in character where truth diverges into the two branches of what is, and what may be.

Again, every exercise of the good will, as distinguished from the exercise of virtuous habits which have been inherited or acquired, implies a disregard of the claims made upon my will by myself as a formed hierarchy of habits and desires. Now the breach of habit and the denial of desire are indeed accompanied, as consciousness tells us, with the peculiar joy of self-assertion, but the breach itself goes with pain and the denial with loss of pleasure passing into pain. In some cases the joy of self-assertion drowns the pain, and makes us insensible to the loss of pleasure; in other cases it is felt to be more than equivalent as pleasant consciousness to the price paid. But the exchange is not always

a fair—much less a favourable—exchange; sometimes we lose, and know that we lose, pleasure by the bargain, but make it unhesitatingly nevertheless. We do not prefer this joy to the other pleasures, though we do rejoice in it when we allow ourselves to be natural; but we choose the conduct which commends itself to our ideas of right doing, because we have a fixed purpose of such choice. Such a purpose partakes of the nature of a habit, though more full of intelligence and adaptability than true habits are: it might be conceived as the habit of doing right.

Clearly, then, the exercise of the good will implies the formation and exercise of a habit to disregard pain and to disregard pleasure whenever the pursuit of duty, or the right object, is concerned. In this habit we have the virtue of self-denial, passing on occasion into the higher form of self-sacrifice when the denial extends to the voluntary sacrifice of permanent private sources of happiness. The name self-denial applies, as contrasted with self-sacrifice, to the denial of temporary pleasures; but manifestly the two are the same virtue in different degrees, the disposition namely to disregard pleasure on occasions of duty.

But we have also recognised the disposition to disregard pain on similar occasions, as inherent in the exercise of the good will and cultivated by it. As the other is a faculty of denial, this is a faculty of endurance, and none other than the old Greek virtue of courage or fortitude. There is a slight difference, indeed, between the application of the idea in these two names. The courageous man is thought of more

especially as one who disregards the expectations of pain which in the coward produce fear. And the courageous man proper does this on the right occasions for the right objects, though a man is very generally called courageous when he shows this capacity, whether directed to moral objects or not. Thus a man is called courageous who is not good, and whose courage is not, as a rule, properly applied. In fact, courage is a virtue because it is a capacity to do right, so far as facing pain is concerned, and because it is a quality naturally produced by right-doing. Just as faith and humility are virtues of direction, so self-denial and courage are virtues of non-direction; they guard purpose from the perversions to which it is rendered liable by the existence of desires and fears.

The man of fortitude differs from the man of courage as exercising his capacity to disregard pain in face of the pain rather than in face of its fear. He endures the actual suffering, and shows the greater capacity for endurance. But courage is not real courage unless it implies fortitude: we would not call a man brave who faced the fear of pain till it reached him, and then fled. He was fearless, indeed, but not brave. Again, it is evident that the man who can endure pain can also endure the fear of it, though sometimes not so well; so fortitude includes courage as we considered it in the popular sense of the word. It appears, then, that though the two names courage and fortitude are applied commonly to different manifestations of the disregard of pain, they apply strictly to the same quality in persons; and the name fortitude, having the wider application of the two,



to pain, as well as to fear of pain, is perhaps the better name by which to call this fourth cardinal virtue.

It should be noticed that the disposition to disregard pleasure and pain, when occasion requires, naturally implicates in its production the production of a disposition to regard them on all occasions moderately, and this latter disposition, so far as it is natural, and it is the natural disposition of health, is a basis for the production of the former. The natural tendencies of healthy persons to desire moderately and fear moderately correspond very closely to the Aristotelian virtues of temperance and courage. It was evident to Aristotle, as it is more evident to us, that these virtues—and the latter more especially—must be exercised according to some idea or rule of reason; but the notion of duty, of an object to serve, was not powerful enough in the practical development of Greek life for Aristotle to find in it either the clue to his rule of reason, or the idea of a more vigorous ability to rise above the claims of desire and fear than that supplied by the principle of moderation.

Practically we aim, in the modern Christian world, at the attainment of this wholesome moderation in desire and fear, by aiming at the subservience of both to the idea of a life to be lived through an object to be served; and we succeed, better than if we aimed directly, in producing persons who are temperate and brave, in their undirected play as well as in their directed work. But we are also apt to produce persons who, because they are accustomed to the idea of large denials and endurances in the pursuit of duty, come to strive after

large denials and endurances in the part of life that lies outside duty, or within the pursuit of duty but irrelevant to it. And reflection on the Aristotelian ideal of moderation is useful to us, just because it lays stress on the aspect of morality which we are likely to ignore. It supplies a check too on another error, into which we are apt to fall in reaction against that last described—the error of not perceiving that temperance and courage are desirable qualities in whatever interest they may find exercise, and that it is wholesome to deny and to endure *moderately*, for no particular purpose, if a purpose does not happen to present itself. In moral health, desire and fear may direct conduct when moral effort is not demanded, but they do so with a light hand; and so light a hold is easily loosed when duty calls. That the hold may be light, a habit of mind should be encouraged in which no desire is tolerated once it refuses to be set aside, and no fear yielded to once it threatens to be over-mastering.<sup>1</sup> But this remark must not be understood to apply to the permanent objects of desire towards which purpose sets, and which are the conditions of its exercise. Our moral life is far from demanding that our permanent objects of desire and sources of happiness should loosen their hold on us, though it does demand that they should be made consistent with the object of duty.

We have considered these four virtues of Faith,

<sup>1</sup> All practice in sacrificing the lower pleasures of physical comfort to the higher pleasures of intellect and emotion tends to produce this habit of mind. Sports and recreations which involve hardship and even moderate danger have a moral tendency in this sense.

Humility, Self-denial, and Fortitude as general consequences of the exercise of the good will, and signs therefore by which its presence or absence may be detected. They are also the conditions by which further growth in virtue is facilitated, the basis on which is built the whole structure of character pointing duty-wards. They are conditions of mind such that, after self-conscious personal life has begun, they either exist in a person or their opposite states exist. If the opposites exist they are a distinct bar to the further operations of the good will. As being the states of mind which exclude the obstructive states, the four virtues are conditions of growth in virtue, as well as consequences of that growth.

If a man have not faith in the power of his will to 'remove mountains' of vicious habit, and to build up towers of virtuous strength, he certainly will not do these things. And again, he who has not the critical eye, directed by humility, for his feeble performance as compared with his lofty purpose unfulfilled, is apt to take the will in part for the deed, and therefore not to do. Neither of these persons is in earnest with the work of the good will: earnestness negatives the motto of each in its motto, 'I can but I do not yet,' or 'I can be, but I am not yet,' to which it adds 'I will.'

Moreover, he who will not endure pain even 'unto death,' rather than fail in duty, will be stopped in his moral progress at that point where there is a pain great enough to stop him. And he who will not forego pleasure, however great, refined, or even self-ennobling, at the call of duty, will be stopped similarly when the sacrifice is too great for him. These two persons may

be in earnest as far as they go, though neither is in earnest to the full extent. Their lack of earnestness, however, is due to the non-fulfilment of negative rather than positive conditions: the pain was more than could be borne, the pleasure sweeter than could be foregone; or rather the character was too soft for so much fortitude, too luxurious for so much sacrifice. In order that the negative conditions of right-doing should be fulfilled the character requires to be tempered till its capacity for endurance and denial is so increased that the good will is practically secure of a victory always. The objection to ascetic practices is that they aim at the transformation of natural character by the destruction of natural feeling, whereas we should aim at transformation without more loss of sensitiveness than is incident to the fact of having fear and desire completely under control. The brave and self-denying man has his fears and desires so under control that they do not prevent his choice of conduct in the pursuit of his main end. Such control implies, and is implied in, a withdrawal of the attention from the objects of desire and fear, in consequence of which the emotions themselves subside into sub-consciousness, either wholly or to a considerable extent. This subsidence is not destruction, though, no doubt, its continuance through long periods without any break would lead to the production of a habit of repression which is scarcely, if at all, distinguishable from destruction. The virtuous man does not keep his fears and desires thus habitually repressed—attention persistently withdrawn from them; but he persistently identifies himself with, and directs his attention towards, his objects of pursuit,

so that when his desires and fears point in *his* direction they rise to full consciousness, and when they point in the opposite direction they fall behind his consciousness gradually into the dark. This incapacity of theirs to turn his attention with them is his control of them, and is the natural effect of practice in the pursuit of objects without regard to the claims of present pleasure and pain. This kind of practice may be obtained in the pursuit of objects other than the direct objects of duty, as whenever a relatively less human pleasure is sacrificed, or a pain endured, for the sake of an object which brings with it pleasure of a relatively more human kind. The mountaineer, for example, disregards cold, hunger, thirst, and fatigue, to the extent of not suffering from these evils—though he would suffer if he attended to them—for the sake of the subtle and complex pleasure of mountaineering on which he has fixed his attention. Nature asserts her claims afterwards, as the saying is; but he has had his good time, and has gone through a moralising practice, moreover, in the discipline that was necessary for the attainment of his end. All efforts of self-control, which, it should always be remembered, ought not to involve mutilation of the natural healthy pleasure-enjoying self,<sup>1</sup> increase self-control, and bear fruit in capacity for endurance and self-denial. But the best discipline is that discipline of self-control, to which all others are subordinate, in which attention and conduct are directed on the object of duty.

Let us survey the character of the virtuous man, so

<sup>1</sup> The distinction between the pleasure-seeking and the pleasure-enjoying persons is one of some ethical importance.

far as we have now determined it. He starts with a strenuous will directed to a right object, in the efficacy of which will he has faith, and with respect to the performance of which he has humility, while he so directs himself upon his object that self-denial and fortitude are habitually exercised by him in its service. We have seen too that these latter virtues come into existence normally as virtues of self-control, and only issue in the destruction of capacities for feeling when these capacities are permanent hindrances to the work of the good will. In this case, and in this case only, they are constantly suppressed, and sink gradually into permanent unconsciousness.

But we have not yet considered the positive developments of feeling implied in the exercise of the good will, though probably they will have suggested themselves to many long before this. Habits in general, as habits, are set at nought; desires, as desires, are ignored, and their objects made subordinate to the object of duty. Is there not implied in this habitual contempt of habit, the formation of a new habit, and in this constant subordination of desired objects the formation of a new desire?

We have already seen that in the setting aside of the realised by the realising self there is brought into consciousness, on the one hand, a pain, the pain of broken habit, and, on the other hand, a joy, the joy of self-assertion in breaking it. As the good will operates on character this becomes a familiar experience, and in every repetition of it attention is, as already observed, withdrawn from the pain of breach, and fixed so that the joy of breach comes into the prominent part of con-

consciousness ; the joy waxes and the pain wanes, because the joy is regarded and enjoyed, while the pain is not regarded and not deplored. Such a joy, which is never despised, never ignored, comes to be a powerful factor in conscious life ; and, if it constantly attaches to the assertion of the self that ought to be, as in good development it does, its emergence in consciousness is the normal sign that this self is asserting itself in the thoughts and acts to which the joy attaches. The growth of virtue makes it the most desirable of all personal gratifications, and its indissoluble association with that growth makes it the one pleasure that never ought to be denied, and the corresponding habit—(if we may call persistence in being one's better self a habit)—the one habit that never ought to be broken through.

Thus virtuous life so moulds the emotional susceptibilities that the joy of virtuous development and the pain of its arrest lie persistently in the focus of the emotional consciousness ; and the virtuous man is more aware of his joys and pains at this point than at any other. This focus of emotion may be called his conscience ; through it he realises himself in feeling ; when his feelings at this point are satisfied he is satisfied, and this satisfaction is a useful practical guide in conduct.

Yet in some respects it may prove a treacherous guide. At the best it only expresses the better impulse of his own poor self, and it is apt to be closely interwoven with much of the still poorer character of that self. As expressing his own better impulse it is certainly a safe guide for him ; but it is not safe when it leads him to expect from others the mode of conduct which it indicates

as best for him. Conscience supplies a *private* index of right-doing, and its indications must be applied by each man to his own conduct only; my conscience can hint to me when I am going wrong, but it cannot tell me when you are. Moreover, conscience will indicate different kinds of conduct to the same person at different times, according to his state of character at the time. It cannot be expected to supply any standard of conduct generally; it is only the mark to each person that his conduct tends to the moral bettering of himself.

Its indications are right for the particular person at the particular time, but they may be wrongly read, or rather the prompting of other impulses with which it is interwoven may be taken for the prompting of the bettering impulse. We get ourselves mixed up with certain habits of thought and action which generally make for good conduct under our customary circumstances, but which under new circumstances may hinder us: and the protest of these habits against new conduct in new circumstances we mistake for the protest of our better selves or consciences. It is indeed no easy matter to distinguish the joys and pains of conscience, which strictly adhere to the creation of new and better life from the joys and pains of prejudice and habit in conventional morality. And this suggests the reflection that conscience in average persons is not altogether suited to be the sole and simple guide to life, while it is a source of strength and gladness in moral difficulty of no mean value. Moreover, the value of one's conscience as a personal guide is evidently more or less according as one's life has been more or less a faithful development



of the better self. The faithless man has falsified his conscience by perverted growth.

Let us turn to the second question that was just now asked. How does the constant subordination of desired objects to the object of duty affect the development of new desire? We have seen that the object of duty comes to be identified with the service of the community, a service that consists in forwarding the good of persons. In this good of other persons, therefore, the satisfaction of virtuous activity is found. The good man, who directs his energy and attention on the objects which serve the community, withdraws his interest from his private desires, and his emotional consciousness comes to be possessed by the satisfaction, perpetually recurring and generally attended to, which is consequent on deeds of service. While he keeps other satisfactions, and the desires for them, under control, this satisfaction is generally associated with, though not essential to, the act of control, and the desire for it enters as a constant factor into the main stream of consciousness. Enjoyment of service and the desire to serve characterise the good man's emotional character on the side of his object, just as enjoyment of his free self and desire for its free assertion characterise it on the side of his subjective self. This characteristic may fitly be called devotion to the service of the right object; and, since this is identified with the good of the community, it is a devotion to the service of persons and the highest manifestation of love towards them.

By conscience towards self and love towards his neighbour the character of the good man is rounded into

a joyful, as well as a freely moving, harmony. The emotional nature is led up into unity through them, and in them the purpose of virtue becomes instinct with the glow of passion. They are the natural resonance in feeling of a life which is in me by me towards my community. In them virtue becomes desirable on the side of feeling as in the four cardinal virtues she is desired on the side of purpose. She becomes desirable in conscience and love by being desired in faith, humility, fortitude, and self-denial. For that reason the latter four take the prior place in a scheme of the virtues, and may fitly be called the cardinal virtues. They are the virtues *by* whose existence the law is fulfilled. Conscience and love are the virtues *in* whose production it is fulfilled.

This chapter should not be concluded without a last protest against the easy error of regarding virtue as a sum of the virtues which so far it has been attempted to exhibit in system. Virtue is a unity, a single state of mind; but it shows itself in acts that require for their production a character that adapts itself to them in a manifold manner, and thus appears as manifold in the system of virtues.

## CHAPTER V.

THE OBJECT AND MEASURE OF MORAL DEVOTION :  
SOCIAL VIRTUE.

I REALISE myself by devotion to my community. Be it a good community or a bad one, it offers the only available field for that moral activity in which I seek my perfection, as complete, harmonious, and free. For me it is a good community if it supplies me with means of moral development in the requisite quantity and of the requisite quality ; and it is a bad community if it fails in the supply, or supplies me with means of moral perversion. If the claims of the community are inadequate to the energy of personal growth, that energy expands itself in wasteful unrest, or sinks at last to apathy. If they are inconsistent with each other, as in an ill-adjusted family they often are, the conflict of adaptation demanded issues either in arrest of growth or in confusion. I cannot be harmonious with myself if I accept duties that are inconsistent with each other ; and if I refuse them, or either of them, my devotion to duty is at that point impaired and growth injured. I cannot grow towards perfection in the full degree if my duty is opposed to that growth : I cannot grow by adaptation to my en-

vironment when the adaptation demands inconsistency of growth. My duty will be opposed sooner or later to my growth, if that duty be not a consistent whole, in correspondence with which I can develop myself into a consistent whole. The perfect self cannot come into existence out of relation to the perfect community, although the idea of the perfect self is logically prior to that of the perfect community. And, at any period of development, the better self, that is immediately possible to each person, cannot come into active existence, without the community that is good enough for him.

The bettering impulse, driven back on itself by the unfitness of its environment, takes refuge in the construction of an ideal environment in which it could fulfil itself, and seeks to transform the real environment in accordance with its idea. It builds for itself a castle in the air of duty, and throws its energy into the work of constructing that castle upon the earth. This it does, if it be strong enough to retain its vitality of growth under adverse circumstances. Growth under such circumstances can only progress by transformation of the circumstances. And man, by reason of his intellectual character, has the power of seeing adverse circumstances far ahead; and, thus provided with sight to penetrate the distance, his bettering impulse leads him to modify his environment from the first, so that it may supply him throughout with the means of development. Thus the realisation of the perfect self takes on a double aspect; on the one hand it is the production of perfected character by me *in* me; on the other hand it is the production of the perfected community by me *for* me.

But this community is for me in common with many others. If I begin to reflect on it at all, I must reflect that it is theirs as well as mine, and cannot be considered good unless it is good for them in the same sense as for me. I am a thinker as well as a doer ; and, as a thinker, I arrive at this simple perception of moral fact. Moreover, my action *towards* others *in* the community has been accompanied by action *with* others *for* the community : and, while the former implies the development in my mind of sympathy with them in the sense of an interest in their well-being, the latter implies the development of sympathy with them in the sense of a tendency to attribute to them needs and desires like my own. I feel and think with them, and expect them to feel and think with me ; this is a consequence of our common life. Therefore when I come to think of a community good for me, I necessarily think of a community good for all of us. And logically I can make no difference between one and another in the all : the good community is one that is good, and equally good, for all. *The virtuous man in desiring his good community desires it as equally good for all.* Such a community is just, and the man who desires it is a just man.

A community may be just without being good in the sense of being a suitable field for the development of personal virtue. It is just, if it distributes equally the goods which it does distribute. Manifestly, then, our idea of the actual practice in which any community should realise justice depends on our idea of the good which the community has to distribute. A community may be conceived as existing for the organisation of

labour in the production of wealth, or for the organisation of force in the protection of the citizens' lives and property, or for the organisation of intellectual labour in the discovery of truth, or for the organisation of each personal life in the production of personal virtue. Communities exist for each of these ends, and state-communities for all of them ; and the justice of the community, and of the man as its member, must be considered with reference to the distribution of that factor in the production of the special good concerned which is brought to it by the community. In a labour-community it is just that each man should receive the product of his own labour, and an equal share of the joint product, so far as it is jointly produced : what each man makes he keeps ; what the community makes it distributes equally if it be just. But in practice it is impossible to distinguish under most circumstances between individual and joint products ; and the application of justice presents different kinds of difficulties in different cases.

Two cases may be broadly distinguished. In one the individual renders services to the community and receives reward out of the joint product : the principle of justice here is clearly that of reward in proportion to service rendered—it being supposed that the community is a labour-community only. In the other case the individual works for himself, and the community supplies circumstances under which the work is most effectively carried on ; thus a fishing-community might own and supply the boats and tackle, and thus the state-community owns and supplies the

means of protection to industry. In such cases, justice demands that the opportunities favourable to labour which the community owns should be made equally available to all, while each man keeps for himself what he makes himself. The existence of persons who waste, either through incapacity or indolence, the opportunities given them makes exact justice difficult in many instances, where the opportunities which the community has to distribute consist of certain material means to the production of wealth. For example, the fishing-community's first approximation to justice would consist in an equal distribution of the use of its boats and tackle to the members of the community; but it would soon appear that all members are not able to make equal use of the opportunities. The opportunities are not in fact equal when the material means are equal, because the members are themselves not equal. Justice demands equality, not in the means of opportunity, but in the opportunity. When the means are unlimited, each takes as much as he can use, and there is no question of just distribution.<sup>1</sup> When the means are limited, strict justice manifestly consists in distribution of means in proportion to the capacity for using them, since thus equality of opportunity is secured. How this can be done is a practical problem to be solved under its own difficulties in each case, and generally it admits of a distantly approximate solution only. The just man in every case is more than the man who adheres unswervingly to the approximate rule of just

<sup>1</sup> Primitive tribal ownership of land supplies an example, since land was practically unlimited in tribal times.

distribution received by his community : he endeavours so to penetrate into the peculiarities of each individual case as to make his action in that case a nearer approximation to perfect justice than the rule prescribes. This he does, generally, by applying the rule, and compensating for its inaccuracy to the detriment of others by taking some burden, more or less, on himself, which the rule does not lay on him but which he perceives to be just. Such a man is often called generous ; but he is simply just, which, after all, is far better. And to be just, not merely soft-hearted, or merely desirous to be just, is no easy matter : a man may desire to be just easily, but he must be wise, and ready above all to take the trouble of thinking, before he can be just.

So far as a community exists for the sake of mutual protection, the principle of justice as equality presents no difficulties. Protection is relative to persons, and, since in the very idea of a community each member, though not equally capable or serviceable or desirable, is equally a person, each is equally entitled to protection. We are making an assumption at this point, however, about which we should be clear, although actually made when we began to discuss the idea of justice. We are assuming that the community is a moralised one, the sort of community with which the self-moralising person finds himself face to face, and in which he finds other persons whose community it also is, and, as their condition of self-moralisation, equally is. Actual communities, as they appear to persons not thoroughly in earnest with the work of self-moralisation, or not quite equal to the intellectual act of generalisa-



tion implied in the perception that the community exists in the moral sense equally for all, need not be just, and frequently are not. So protection and other goods are not equally distributed; and the members, not seeing the community fully interpenetrated with the idea of its moral significance, apply to it the ideas of partial justice intermingled with injustice to which they have attained in the halting progress of their own moral life. The idea actually realised in most partially moralised communities is that of protection and distribution in proportion to some scale of extrinsic or fictitious value.

The demand, however, may be made that persons should be protected by the community in proportion to their serviceableness to the community. This is reasonable, not because it is just between the members as distribution of opportunity according to capacity is just, but because it is productive of increase in the common life which is the common aim of all. Social virtue extends beyond justice, which might be called the fundamental social virtue; but of this more hereafter. It should be noticed here, however, that the serviceable persons—in so far as they are, and they generally are, good persons—will naturally repel the idea of proportionate protection, so far as concern for the service of the community will allow: it is inconsistent with their idea of personal dignity on the one hand, and with their idea of justice on the other.

Protection by the community might be regarded as one of the opportunities for labour which a labour-community distributes, and as the opportunity which

all persons equally require. This view applies to the protection of persons as well as to the protection of property. Nevertheless in the main the protection of persons is the maintenance of their opportunity for life rather than for labour.

Let us now consider the just community under its other aspect, as requiring services from its members rather than as conferring benefits on them. It distributes burdens as well as rewards, sacrifices as well as opportunities. Claims are made in the community on every member. These, it will be remembered, we distinguished as of two kinds,—(1) those made on the members to fulfil the common ends, (2) those made by the members on each other. In fulfilling these claims the members perform services,—(1) public services such as contribution towards the expenses of a war and the public administration generally, (2) private services to one another.

The general principle is at once evident. Sacrifices, like opportunities, should in justice be equal for all persons. As rewards are in proportion to merit, so should burdens be in proportion to strength: to the hero is allotted the cross as well as the crown. And the principle applies immediately to the first class of services, those namely which the State requires from the citizens; though in practice our rule can only approximate to the principle. The just State demands contributions of money and service in proportion, so far as possible, to the capacity of persons to contribute, with a view to the equalisation of sacrifice between all. The principle of equal sacrifice is, indeed, a generally accepted

doctrine of political economy as applied to taxation, and some attempts are made to reduce it to practice in the system of State taxation.

It is more difficult to apply the principle to the second class of services, those namely which the members of the community render to each other. And here we must distinguish broadly between the attitude of the community as a whole, expressing its common will in its law, and the attitude of the individual members who serve one another. From both points of view, in the moralised community, so far as it is moralised, the services are services into the idea of which duty enters as justice enters, not merely the means by which objects of desire may be gained. And from both points of view, in the semi-moralised and semi-moralising community which we are not discussing, the services are means of gain into the idea of which neither duty nor justice enters, but with which the idea of justice is vaguely associated in the mind of half-hearted self-moralising persons.

Services between persons in a just community must be reciprocal, and equal, not to but from—equal, that is, in the quantity of effort or sacrifice made. The just community which demands equal sacrifices from persons demands equal sacrifices between persons. But this demand cannot, it is manifest, be enforced by the law of the community. Law cannot distinguish between A and B as regards the ease or difficulty with which they render services to one another. It can only compare the services, and can only, therefore, undertake to redress and prevent inequalities in reciprocal service.

Now if competition between A and B and all the other members were perfectly free, and no one had any initial advantage by means of which he could force others to an unfair contract, then exchange of services would take place inversely according to the *utility* of those services in the only sense which can be assigned to the word. It is for law, therefore, to secure the maximum of freedom consistent with other conditions among the competing individuals, so that equivalent services may in this way be exchanged. The whole difficulty of legislation centres in the fact that some use their freedom for the creation of vantage grounds, by means of which the freedom of others is afterwards destroyed.

But, manifestly, the law, if it succeeded in securing such a maximum of freedom, would still have only approximated distantly to justice. It would not have secured equality of sacrifice. Legal justice at its best is only as just as legal justice can be: it is not equity. But though law cannot distinguish between the degrees of sacrifice involved in equal services towards one another by A and B, still A and B may distinguish. If instead of acting as hostile units driving free bargains, they allow themselves to be sympathetic units recognising mutual claims as duties, they may bring their free contracts into approximation with the fairness of equalised sacrifice. A and B then become partners, the strength of A compensating the weakness of B, each serving the other in proportion to ability. The just man's justice includes a principle of compensation, as due from the strong to the weak, which supplements and qualifies the main principle of reciprocity in equal

services, this main principle being simply applicable only between those of equal strength.

If A the strong is also better—more willing to serve—than B the weak, then if A takes B's service as the measure of his ability to serve, he is deceived and imposed upon in the bargain between the two. The sacrifices are not equal: both are injured, A materially, and B morally. If the good man who is strong is surrounded by persons, weaker perhaps than himself, and certainly less willing to serve, and whom he trusts, the claims on him become excessive and, perhaps, destructive of his ability, while they are demoralised. He cannot discriminate with any certainty between willingness to serve and ability to serve, except perhaps in those whom he knows intimately. He cannot be just, either between himself and others or between others. He can only be as just as circumstances allow.

But the just man requires to be just, whether circumstances allow or not. If they do not allow it as they are, his desire for the just life is not turned back on him finally, but goes out from him again, as a desire for the change in circumstances which will make the just life possible. The full principle of justice cannot come into activity—the just man cannot be just, nor can the community's law—except in so far as the community is one of moral equals, of members equally willing to serve. The just man's desire for justice, then, transforms itself into the desire to realise this community. In other words, his duty to live in his community as if it were equally the community of all its other members, takes the form of a requirement

laid on him to develop the moral possibilities of all members. Moreover, this duty is towards each in proportion to the moral deficiencies of each, since the end sought is moral equality among all. The good man's duty as the just man is to the sinner, not to the saint.

We have considered the justice of the community, hitherto, with respect to the goods and the burdens generally which it causes to be distributed among its members, though always with the assumption that the idea of duty underlies the idea of service in every case where the idea of justice enters. Our conclusions so far may be briefly summarised. Justice is fulfilled when sacrifices are equal and opportunities are equal. Equality of opportunity and of sacrifice cannot be secured without omniscient wisdom, except in so far as persons are equally willing to use opportunity and to serve by sacrifice. Justice is fulfilled, so far as possible, by such approximations to it as the moral inequality of persons permits, and is further aimed at by the moral development of all the persons towards equality in willingness to labour and to serve.

Thus the idea of the community as merely just drives us back to further consideration of the community as justly good—as equally to all persons their opportunity for virtuous development. From the point of view of developing personality, the community is mainly the object towards which the activity of virtue exercises itself. We see now that a community cannot distribute its services and its burdens with perfect justice unless it has first fulfilled justly its function of supplying occasions for the development of personal virtue in its members. This function towards persons is, then, its essential func-

tion, since on its fulfilment the justice of the other functions depends; and when it is fulfilled justly, all distribution of other goods is naturally just, because all persons are equally willing to serve.

Let us, then, consider apart the justice of the community as distributor of moral good. To each person it presents opportunities to labour for the production of material good, and opportunities to sacrifice for the production of moral good. Some labours and some sacrifices it demands: others it suggests only by the supply of opportunity. Its aim in justice is the equal development of all, but it is not omnipotent to produce this development; this is each person's own work in the main by use of the circumstances around him. The community, if it be just, demands equal labour and sacrifice from all, and gives equal opportunity for labour and sacrifice to all. But the labours, no more than the sacrifices, are to be estimated by the quantity of service produced; labours are morally equal when the efforts are equal, while the quantity of service varies with the ability and effort jointly. Moral growth is proportional, not to the service, as we well know, but to the effort and sacrifice expressed in the service.

The difficulty of realising such a community by any general method of dealing with persons is at once apparent. Law, it is clear, can only reduce slightly the difficulties of a solution which cannot be seriously attempted by the community as a whole. But what the mass of citizens cannot attempt, the individual citizens may jointly do. Personal knowledge, personal influence, and personal control of the circumstances of others—

by these means the community may be adapted differently by persons to the different wants of other persons. All are subject to the general influences of the law, the public opinion, and the attraction of those common ends in which each can voluntarily serve the whole. These general influences can be adapted to the moral needs of each person by the other persons immediately surrounding him, if they sufficiently understand the case, and are sufficiently willing to serve by dealing with it. The stronger members of the moral community moralise themselves directly by their use of its institutions for public service, and by private service towards other members. The weaker members and the children moralise themselves by the same means, which the stronger members immediately associated with them should help in adapting to their requirements. This service of assistance in the moralisation of others is the special service due from the morally strong to the morally weak—from virtue to vice;—and it overshadows in importance all other services. Good men owe one another nothing, though they give one another much in the way of moral help; but the good man's debt to the bad is heavy in proportion to the moral distance between the two. For service due is in proportion to ability. *The perfect man, in whom the idea of service rises to its highest limit, conceives of himself as owing to all members of his community that perfect virtue which he has and they have not, and as responsible for the payment of that immeasurable debt.*

The good members of the community, then, accept it as their duty that they should become centres of



moralisation, making available to all the lessons of the community : and this idea of their duty they carry out by modifying the circumstances and influencing the wills of those who are in any respect adjacent to them. Persons interest and attract each other ; they are separate indeed, but nevertheless capable of reflecting and interpenetrating each other, by their joint reference of themselves to a common experience in the past and a common idea of their end in the future. As thus participants in a common nature, they can become continuous with one another, and they do, though without loss of their separate personality, each contributing to forward the life or cause the death of the others, as do the separate cells in a living organism. The comparison of a community to the ordinary forms of organic life is more than the illustration of mere metaphor. The fact to which it points is simply this—that in a community there is interpersonal, as in an organism there is intercellular, activity. An assemblage of persons may be said, then, to become more organic as this interpersonal action comes to manifest itself more in thought and conduct.

It is manifest that each person is directly suited to be a centre of influence for the production of character like his own : his natural tendency is to modify the circumstances of others into accordance with those which formed his own character, and to influence their ideas in the corresponding direction ; and the natural tendency of persons influenced is towards imitation, as a general rule. The good man, even without purpose, is thus a centre of moralisation. But he is also more than

this ; he takes the moralisation of others as his mode of service deliberately purposed. As so doing, we may call him an organ of moralisation in the organic community. All such good men form implicitly a voluntary association for the moralisation of the community ; and this association is the moralising organ—an organ which presents this peculiarity, that its object is to absorb all the community into it. Thus it tends always to efface the distinction between its members and the common people.

Willingness to serve is the test of moralisation, and this willingness it is the duty of the moralising members to produce in their fellows. As one condition, it will be well that they should understand the disposition of character that underlies this willingness for service and is poured out in it. This subject we have already discussed and are still discussing. As another condition, it will be well that they should understand, to some extent, the disposition of the character with which in each case they have to deal. This is a hard condition, requiring much general knowledge of mental facts, and much wisdom in perceiving particulars. *But the method of moralisation which all moralising members, and not the professional educator only, must adopt, is that of engaging other members with them in joint service for the common ends.* Willingness to serve is acquired by practice in willing service. The educator's professional knowledge avails only to guide him in the right distribution of individual service for the individual's good, so that neither too much nor too little may at any time be required. It avails him nothing without that practice in willing service which is the sole and essential means

to the production of willingness to serve. Now the moralising member does all that he can do towards identification of the other members' will with his, when he engages them by any means in service with him; and so soon as they respond to his movement of will as identifying itself with theirs, they take on his willingness in service; and by the practice of such service, willing with him, they acquire some measure of his habitual willingness to serve.

Thus the joint service of the more moralised and the less moralised members, for the furtherance of ends common to both, is the natural means whereby the morality of the community is developed towards its limit, in a community of moral equals reciprocating equally each other's willingness to serve. The little girl who helps her mother to mind the baby, and cook the family dinner, acquires thus the capacity to reciprocate her mother's services to her. This joint service implies the existence of common ends towards which all should live, the better leading, and the worse following, but *all tending to equality of willingness, having chosen to act with identity of end.*

The lower class of common ends includes those which involve the production of material welfare for *all* members, and appeal thus to the egoistic and altruistic motives on the material side in *each*. Such ends are the family dinner—and the cooking of it too—on a small scale, and the safety of the nation from invasion, or the city from fire, on a large scale. For the furtherance of such ends, it is not difficult to engage the service, in labours and in sacrifice, of those whose

moral disposition is subnormal. Hence it is that the poor family has a moral advantage over the rich, and the members of a struggling nationality, when they are true to themselves, over those of a nation that is safe. It should be remembered, however, that while the development of morality is greater in the faithful ones when material good fortune is low, much risk to faithfulness is run whenever personal gain may be made by abandonment of the general cause.

The higher class of common ends may be taken broadly to include those which involve the moral, more directly than the material, welfare of the community. Much public service in the political sense is applied ostensibly to such ends as these. In a political conflict, the better members of each party believe that the triumph of the party is the triumph of the common good, moral as well as material; and the less worthy members, coming in contact with this belief, generally imagine at least that they are identifying themselves with it. When the contest rages round some special policy, such as the disestablishment of a Church, the enfranchisement of a class, or an alteration in the political constitution, the reference of all thought and effort to a moralised conception of the common good becomes explicit: all argument is directed to produce the conviction that the community will be better or worse for the change proposed. The community is better for the struggle almost always, because each member has been called upon, not only to think, but to act, and to act under the conviction that he is doing the public service. Moreover, many have acted in conjunc-

tion with better men than themselves, and have been lifted into a more earnest moral atmosphere than that which is created by their own personality. It may be said, indeed, that many have been brought into contact with a lower atmosphere also, but this is not so important, because the action of all has been ostensibly identified with the furtherance of the public good. The good members are, in fact, always free to say the whole of what they mean, and to drive home as much of it as they can, but the bad members are not free; they must pretend to have, if they have not, a regard for the public good, however ignobly they may define it.

The conception of the common good rises to its highest, as that of the good community developing the virtue of its members by the virtue of its members, under institutions and a public opinion which recognise an equal right in all to the privilege of service, and demand an equal recognition in all of the duty to service. Homage is paid to the idea of justice, as the idea of the community, by this recognition in all possible ways of the dictum that privileges and duties should be equal to all, and thus virtue equally possible and equally difficult to all. But this idea of the community cannot be realised perfectly, till the good community has attained its end of developing virtue to such a point that the virtue, as expressed in willingness to serve, is equal in all members. The community cannot realise its idea of community till all are morally equal; and when all are morally equal reciprocity of service is equal naturally—the community is just by the universal will of its members.

This end of the community is pursued by means of interpersonal influence in the community, the better becoming still better by the virtuous activity of service which brings the worse into closer approximation to them. Thus the fulfilment of the end postpones the end: moral inequality perpetuates itself in the pursuit of moral equality. Nevertheless, it is the end to which the community does approximate in the joint service which it lays upon its members, and the end which, as moral self-consciousness develops in them, they consciously pursue. It is an end which can only be reached in an infinite development, each step towards it implying in its very conception the necessity of another step. And the idea of it can only be conceived as that of a community in which not only are persons all equally willing to serve, but in which all have attained to perfection as the limit of their personal development. This community of equally good and perfectly developed persons is the limit towards which the infinite development of the community tends. Moreover, the personal development of each is relative to the duty, accepted as such by him, to hold himself responsible for the development of all. *The infinite growth of his self-conscious character towards perfection reflects itself into the infinite duty which he purposes to fulfil of realising that growth for all through their recognition of that duty.*

With this realisation of an infinite duty towards others, there goes the exaltation and pouring forth of all desire and affection into an infinite love towards others, a love that rises far above all mere tender-heartedness, and is just in a new sense—just, not because it is measured

out duly to each, but just, because it is unmeasured— infinite—supplying itself to each without measure as it is needed, not wastefully, or hurtfully, but inexhaustibly. The idea, at least, of such an infinite capacity for love comes to all who clearly accept the infinite duty ; but it surpasses the powers of the best, even as they can foresee themselves in their physically limited perfection. And at that point the idea of infinite love reflects itself into the idea of an infinitely loving Person who is in this, as in other respects, the Divinity relative to our Humanity, who is all that our perfection presupposes as possible and yet must itself fail to be.

The virtue of Charity or Love, as we can now define it, is the crown and completion of all virtue. It is not an elementary virtue, but a final one, and can certainly not be attained, as many may indolently imagine, by the short cut of mere tender-heartedness. It can only be realised by those who hold personal virtue as the best of all personal goods, and who place no limit on their doctrine of sacrifice for service, being equally ready to apply it to others as to self. It is a difficult and complex virtue to realise, simple as it seems when realised. It comes late in personal growth, because it is the fruit of all the virtues. They culminate in it, but it does not absorb them.

Once more we must return to the idea of the joint service in which all members of the community live a common life, and act as with a single will. As so living, there develops in them jointly the consciousness of a common personality, of which the common will and the common ideas are expressions, which is realised in their

common character, and still further realises itself in the development of that character. The virtue of the citizens is, in part, the virtue of this common personality which lives in all and is represented by all ; and the idea of personal dignity, and desire for personal development and well-being, which are natural to the persons, attach in their minds to the common personality, that of the family or the nation, as the case may be. To each, so far as the common life is potent in him, it becomes to him an object of intense desire similar to his desire for his personal life ; and as the idea of the common life rises to its loftier moral heights in the idea of the development of the common virtue, his desire follows the direction of the idea.

But the virtue of the community—the common personality—requires an object different from this virtue itself, just as the virtue of persons in the community does. The virtue of the common personality must be towards an object outside itself, exercised in common service which is not interpersonal. It requires another community, in the service of which it may act virtuously.

And the other communities are generally present, interfering and making claims as persons do. They have to be dealt with, either rightly or wrongly. The common will of each community is, at an early period of the common life, subject to interference from the common will of other communities. This interference it is natural to resent in the first instance, as a check on the common desire, and still more as an insult to the common personality. But communities, like persons, learn in course of time,—and develop their



common life and personality as they learn—to subordinate their purposes to the general purpose of all communities, and to appreciate this, as reflected in the idea of free life for all, and equally for all. From forced subordination of each common purpose to the common purpose of all communities, the common will sets itself free, by accepting the universal purpose as its purpose, identifying its will with the universal will, part only of which it originally fulfils. Forced subordination of purposes to the universal purpose rises thus into the stage of duty, and passes above that stage at the point where the common will pursues the universal purpose as its purpose, freely chosen and earnestly sought. This it does when employed upon intercommunal services; and in so doing it normally sacrifices its own material good, and gains the moral good that comes, to nations as to individuals, of sacrifice in service. Persons develop in themselves the self that is not yet, by seeking satisfaction in interpersonal service, in which search they find, besides the service to others, a widened life and widened capacity for life in themselves. Nations develop, in all who live the national life, the undeveloped capacities of the national character, by seeking national satisfaction in international service; and they too find in that service the expansion of themselves into the completed whole which includes their own character and all that is complementary to it. In both cases, one truth should be noted which is easily overlooked. Character is not developed normally by cutting it down, but by building it up: the process is one of supplement rather than of destruction. Service, or the life towards

others, is manifestly the natural way of acquiring those qualities in others which are supplementary to our own, because those whom we serve we learn to know, and also to love, while we serve.

It is not necessary further to pursue this subject of intercommunal virtue. Step by step, its idea follows that of interpersonal virtue, and has been studied in the study already given to the more simple virtue, in the development of which its later development is implied. The good man, so far as we can yet reach to the idea of him, lives a double life with a double virtue towards a double duty, but under a single law of life-development, since the life is personal to him, though manifested doubly. He lives a personal life towards persons, recognising ideal equality of rights and duties in them, which it is his duty with them to make a real equality; and in the fulfilment of this infinite duty he develops an infinite personal character. This duty, on its side of moral service, requires that he should live with others a common life towards other communities, recognising ideal equality of rights and duties in them, which it is his duty, as participant in the common life, to make a real equality; and in the fulfilment of this infinite duty he, with his fellows, develops in himself and in them an infinite common character. The personal good life is more essential, because it is primary; but the common good life is equally necessary, and it is in several respects easier, once fairly begun.

In this double life, the good man strives to sustain his enormous and manifold burden of 'duty to his neighbour,' staggering under the weight of the burden

perhaps, and fain at times to lay it on the adequate shoulders of omnipotence, but rejoicing nevertheless in the very infinitude of the service whence he draws his material for an infinite development of himself. He has already answered by his practice the question which he may now address to his intellect—‘Who is my neighbour?’ At the first, his neighbour was the person whom he found to be near, claiming service in acts or abstentions, the person, therefore, towards whom from the first dawn of morality he recognised the claim of service due. The original idea of the neighbour is, thus, that of the person to whom he owes duty, whom he ought to serve. And those whom he ought to serve, and who also, as later appears, ought to serve him, are those whom he recognises as members of his community. Now he has reached a point at which he sees service to be due from him, as one participant in the common life, to those who participate in another common life. In those others he thus recognises practically the rights of a neighbour—a member in the same community. He owes them service, and they make up between them the sum of humanity. All members of all communities in which the moral ideas of duty and service are latent—and these are all human communities—are members of one great community, each owing service to the others.

But the establishment of this single community does not abolish the separate communities out of which it grows. If it were to do so, one of the two leading ideas of community would find no fulfilment: while the good man would have all men given to him as neighbours in his personal life—a multitude to which indeed his

imagination and feelings could hardly expand—he would have no neighbours in the fuller sense of participants with him in a common moral life, because there would be no other community towards which to live the common life. Neighbours in the second sense he requires, for their sakes even more than his own, as well as neighbours in the first sense. He, therefore, needs to have his special community of neighbours in the old sense, near enough to him in circumstance and character for a joint life, as well as the wider community of their neighbours farther off, to whom he lives his double life.

The personal life of duty, however, he owes to both, and owes equally under the same circumstances. If two men, as men, are drowning, it is equally his duty to save each, except in so far as he may know that one of them is presumably less able to help himself. If a choice has to be made, however, between neglect of this duty to one and the other, then it is natural that the choice should be given in favour of the kinsman or friend to whom affection is naturally warmer; and if there has to be a choice of duties it seems better that the choice should follow the natural order of development, since in that case more virtue will be exercised on the whole.<sup>1</sup> Again, it might happen that a choice had to be made between saving a more useful and a less useful life, judged from the standpoint of public service; and in that case it would be more reasonable to save the more serviceable life, since thus a larger service is rendered to the community. Other and more

<sup>1</sup> In the idea of national hospitality, however, we find the opposite view expressed.

difficult cases arise in which a choice of services has to be made, and the idea of what is natural, or of what is reasonable, generally avails to solve them as they arise. The fact that there are difficulties of application does not impair the truth of the general statement that the good man recognises in all men an equal claim to service, though he, as a being of limited powers, cannot equally respond to every claim, and must therefore regulate his conduct by general principles of expediency in the furtherance of the universal well-being. He has taken upon him the burden of an infinite duty, and, with it in view, he regulates his conduct so as to forward its joint performance by the universal community as much as he can.

## CHAPTER VI.

## THE SOVEREIGN SELF IN THE SOVEREIGN COMMUNITY.

WE have examined the idea of the community as the object of that personal service which is the means of personal life in moral self-development; and we have found that it is the idea of a community in which all persons accept as their ideal, and strive to realise, moral equality among themselves. The acceptance of this ideal lays upon each an infinite duty, towards the fulfilment of which he lives a common as well as a personal life; and the object of the common life is found in the community of communities. The object of his personal life, thus extended by the recognition of duty to all members of all communities, has come to include all humanity—the sum of persons who do, or can, regulate their lives by the idea of service due to others; for to all men we naturally attribute as possible the idea of life in accordance with duty, and this implies the idea of life as service due. The moral community, then, is a universal community, including all who can live the moral life; and it is a community of persons ideally equal—a community, that is, of persons who take moral equality as part of their ideal, and strive to realise it

in a common life. But this universal community is heterogeneous and organic: it contains partial communities of persons living each a common life of service to the whole, influencing each other more especially in their personal lives and the other communities in their common life, forming an organ with a function of its own for the furtherance of the universal commonweal.

Let us now return once more to the standpoint of the individual personality, placing the motive of conduct, as we have seen that growing personality does place it, in the impulse to liberate self from circumstance, on the one hand, and from self, on the other. Our moral progress all along has been traced to this as its inner—its subjective—source. We develop, and develop morally, because, in the language of self-consciousness, we will be free—free from the bondage of ourselves, our fellows, and natural law. The means to this development we find in willing service; for in it we escape from the compulsion of our own character, the motive to action being always outside ourselves, and we escape from the compulsion of our fellows because we realise their motives in ourselves: we lose ourselves as motive in them, and find them as motive in us. And as respects bondage to natural law, we escape it similarly by accepting it as a means to our ends, not an obstacle in our path. As we escape from the dominion of man by *servi*ng him, so we escape from the dominion of nature by *usi*ng her, respecting her laws and co-operating with them, so that they co-operate with us for the production of our ends. When men deal with men as using them

only, they deal with man as they should deal with impersonal nature, setting aside the claims of morality to reciprocal service.

In the service of man and in the use of nature, we free ourselves and become ourselves, always objectifying the motives of our conduct, and thus enriching our subjective life. Practically, it concerns us much more that we should know, as we do know already, the means of growth—our object—by which we reach forward towards the end of our perfection, than that we should have an idea of that end itself. Nevertheless we are constrained to ask for a description of that end, so far as it can be described before it is attained. We seek an account of the ideal of personal perfection, as it reflects itself in the ideas of the good man who pursues it, by serving man and using nature.

The ideal to me is *myself* free, not another person, even the best that I have ever known or heard of, but myself. At the present moment I have a particular self-consciousness of my own, which is neither particularly good nor particularly bad, neither particularly wise nor particularly foolish, but which is particularly mine. It is not merely constituted by the memory of my life-experience, though it is profoundly modified by what I remember of that experience and still more perhaps by what I have forgotten. It may be a consequence of that experience, of ancestral experience,<sup>1</sup> and of other circumstances which vary indefinitely from case to case, all of which have resulted in *me*, with my special physique conditioning my self-consciousness as it first awakens, and

<sup>1</sup> It would be more accurate to say ancestral influences.



conditioning further its rate, and even its mode of growth and adaptation to circumstances, while circumstances variously condition it. I am myself now, one of the infinite varieties of personality possible to an evolution so complex as that of the self-conscious, self-regulating, world-mastering being, man; and this myself of mine will be with me throughout my life, making everything different for me from what it is for anyone else. All that I may ever become will have grown from the topmost bud of this present self; and, whether I forget it or not, what I am now will enter into all that I may be hereafter. This is a practical reflection, and concerns the educator. With a due sense of it, he will not err, as many do, by foolish attempts to ignore or destroy the present personality of any child; and he will be careful to infuse into growing minds a sense of the lasting evil involved in any wrong development of personality, however temporary may be the conduct which brought it into being.

So far as each man's ideal is *himself*, he only can construct it in his own ideas for himself, remembering always, however, that he cannot do this apart from humanity, by solitary intellectual reflection. He must construct it while he acts, serving man and using nature, and modifying himself in conduct thereby, so as to become a more efficient member of society relative to the particular work which he has to do. He will do well to think of his ideal self always in connection with his own usefulness, rather than with usefulness in general; because his ideal self must be relative to him as well as to the notion of serviceableness. And he

will probably reach forward to its realisation most effectively by endeavouring to acquire skill and power to do whatever he finds most difficult to do at any time, rather than by contemplating ideas of a completed self.

But in so far as each man's ideal is himself *free*, it can be defined in general terms for all. He lives in the face of a world—including his own character and external circumstance—which is given to him, not chosen by him, at the first dawn of his self-consciousness. His objective environment lays conditions of life upon him to which either he must conform or die. And in a general way he always conforms; seeking life, he obeys perforce the laws which make life possible. His subjective environment of character lays conditions of life upon him also: he cannot break away suddenly from the basis of habitual thought and desire which is his present character, without risk of enfeeblement to his moral, and consequently to his correlative physical, vitality. Thus he is triply subject to necessity—to nature, to man, to himself. Yet, as he is a self-conscious active being, freedom is essentially his ideal of life. It appears to him then in a triple form, as freedom from nature, from man, from self. Seeing that necessity surrounds him, it is evident that this freedom cannot be *found* by any man in an isolated independence of that triple environment which conditions him. Nor can it indeed be *sought* consistently in such isolation, since the idea of freedom in the abstract is purely formal, and, having no content, cannot be used to define an object of pursuit. But the idea of freedom under the circum-

stances of necessity is an idea pregnant with manifold content, and therefore an object that can be pursued. Moreover, a man cannot by isolation seek freedom from self.

Persons live in a world either as subjects or as sovereigns, either as obedient to law or as its source. The sovereign is free ; the subject is not free. The ideal of freedom is the realisation of self as, not subject, but sovereign, giving laws to self and to the world which both self and the world are ready to receive. In its completeness, this ideal sovereignty includes the past, the present, and the future ; but its practical application is to the future only. The past and the present are as they are : they represent the absolute necessity which must be absolutely accepted in all after-assertions of freedom. The sovereign first takes the world as he finds it, and makes this world the basis on which to build his ideal self and his ideal world. He may, however, thus take it either in the spirit of the subject or in the spirit of the sovereign. He may see in it a necessity alien to his will, to which he must conform ; or he may see it in a partial realisation of the purpose which he seeks to realise completely. Nature may seem to him as an enemy to be conquered, or as an ally, who has done his work without his conscious guidance so far and is ready now to be guided by him, guiding him also, towards his end. In the latter case he sees himself as sovereign come into an inheritance of natural purpose, which he makes his own by understanding natural law, thus absorbing nature's guidance of him into his sovereignty over her. Society, too, may seem to him an evil thing

which he must revolutionise, or a good partially accomplished which it is his purpose to carry out towards its end. He may be sovereign if he can interpret social facts as resulting from the operation of social laws which lead on towards a social end that he chooses for his own. And by the same spirit of faith in his essential sovereignty he may look upon his own character, not as a bad thing to be despised, but as a good thing to be made better—as an incomplete realisation, but still a realisation, of his personal end.

In this way, the impulse of freedom may assert its sovereignty over the past and the present, by asserting the partial realisation of its essential purpose in both. This assertion, it is evident, carries us once more beyond the moral into the religious consciousness. We find ourselves asserting that the present has been fashioned as we would have it fashioned, if indeed we could quite clearly understand our own purpose. We are driven to this assertion by the claim to sovereignty which we find implicit in our moral consciousness; and such an assertion implies the idea that the world is fashioned by a purpose relative to our moral purposes, and towards the further realisation of which they are directed.

Of this religious idea, implied in moral ideas, there are many caricatures, arising from the tendency of the intellect to consider one part of an idea at a time. Thus there is the idea that the world has been so fashioned without any reference to man as further freely fashioning it; whence it is inferred that man is presumptuous when he doubts that it is in its present state a perfect realisation of divine wisdom and goodness, and still more pre-

sumptuous when he dreams of improving it. In truth his faith in its goodness is relative to his conviction that it is his business to improve it.

In times of great difficulty and darkness, it is right that men should fall back simply on the religious idea of purpose in the world fulfilling their moral purposes without them. Indeed this is the natural way of resting from moral labours, as it is physically necessary that men should rest. But the normal attitude of the good man's mind, when it is at work, is very different: it is that of faith in a sovereignty which he inherits, and this faith stimulates him to make good his claim to the inheritance. This he does, in the first place, by understanding the world as it is. If he does not understand it, he cannot strictly *see* that it does realise his will. By faith he may *feel* that it does, asserting that the whole is what his moral consciousness claims it to be; but he does not see it in his intellectual consciousness yet, and the world is not his world and minister of his will until he sees that it is so. Thus his claim to sovereignty over the past and the present lays upon him the enormous duty of understanding the truth of fact, in order that he may find in it the expression of a will with which he can identify his will. He claims indeed more than he can in a finite life ever hope to realise; but he realises his sovereignty towards the present always and only, so far as he does realise it, by understanding its truth with a sense of its goodness.

The practical activity of sovereignty is towards the future, as its speculative activity is towards the present. Practically, the sovereign accepts the present and controls

the future. But the moral sovereignty is manifestly realised towards the future, almost as much as towards the present, by accepting it as it comes. It becomes what it will be without the influence of my personality to any considerable extent. Still that influence is a factor in the future as it is not in the past ; it may co-operate with the forces that make the future, or it may not. The sovereign personality chooses to co-operate, and to co-operate in the same spirit of self-identification with the purpose of things which makes a sovereign acceptance of the present possible. In this spirit, he accepts the end towards which all things tend in nature and in society as the object of his moral desire—the state of things that ought to be ; and he accepts the laws of nature as the means by which he, and all things, carry out the development of that end. He identifies himself with law as the expression of the desire that would be his were he completely sovereign ; and to this end he seeks to understand law as the truth of that natural operation by which things become what they are to be, and by which also they have become what they are.

So far he seems to realise his freedom by completely, in a sense, giving it up, by wholly identifying himself with the necessity which he finds governing the future, as well as the present. So far his duty to realise freedom resolves itself into a duty to submit gladly and with understanding. This is no small matter, however, and the development of personality which it implies for him is very great. He becomes free by becoming such a person that he is in character and intellect at one with the world, knowing the law of all truth and rejoicing in

its fulfilment—free because he accepts it as identical with his own will—with sovereign satisfaction, though without sovereign power. This is the freedom of knowing the truth that maketh free.

But sovereign knowledge and sovereign satisfaction are not sufficient to satisfy the demand for sovereign freedom. Some efficiency of control over the destinies of the future, some power to create in the fulfilment of the purpose that is fulfilled—these are implicitly claimed by the moral consciousness when it asserts freedom. The good man needs wisdom and the spirit of obedience, indeed, by which he realises the world of natural law in his self-consciousness ; but he needs also efficient liberty, by which he may realise the ideas of his self-consciousness in the world. This liberty he practically assumes whenever he attempts to carry out his practical ideas of the desirable or good—whenever he sets an ideal object before him and endeavours to make it real. In other words, he asserts his efficient freedom in all his pursuit of ideal ends, whether the notion of that freedom can be at any time justified to his understanding or not. In no other way can he intelligibly assert it, so as to admit of any question being put respecting the conditions under which each man's efficient freedom may exercise itself unchecked. If a man act under the impulse of random motives not conducing to the production of an intelligible end, then his freedom is a mere matter of accident ; he may not happen to meet interference, but he cannot take measures to make such interference impossible, unless he have the powers of that impossible thing, an absolute despot ; and even then he would certainly fall

under the dominion of his own habits and insatiable desires. Freedom is impossible when not asserted intelligibly; and to man freedom is possible, simply because, as a rational being, he has ideas and can take ideal ends towards the fulfilment of which he wholly may act.

A man is efficiently free when he concentrates his activity on the realisation of an ideal end, and is not interfered with either by the laws of nature or by the wills of men. Manifestly this non-interference depends on the nature of the ideal end which he has chosen; it must be consistent with the laws of nature and with the wills of other men. Now the man who has realised in himself that freedom of wise obedience to nature which has been already discussed, will naturally choose ideal ends which, though they surpass nature, are yet consistent with her. The only danger is that he will lack faith in the notion that he can choose ends surpassing hers; and probably he will lack this faith, unless he looks upon his ideas as continuous with natural law, and himself as a *self-conscious organ of nature*, freely carrying out the purposes partly fulfilled by the necessary laws of unconscious nature, but dependent on his freedom for their further fulfilment. The completely free man feels himself to be neither the slave of nature nor her master, but her ally, finding his purpose in hers and hers in his, carefully studying her indications of law and natural ends, and no less carefully attending to the promptings of his own personality towards the realisation of ends transcending nature, the ultimate end of human freedom more particularly.



Thus consistency with natural law resolves itself into the unity of nature and man, man's freedom being continuous with nature's law, so that when man's claim to freedom is satisfied, both tend towards the realisation of the same ends.

But interference comes to each man's will, not only from the laws of nature, but from the wills of other men. Freedom, therefore, for *each* in a group of members having contact with one another can only be gained when *all* their wills conspire to the same end. The ends, therefore, which each ought, for the sake of freedom, to choose are ends which can be desired by all in his community; the free man desires the common desirable. In so far, however, as the others are not free, they may desire other ends more than the ends which are desirable in common; they may not actively desire these at all. The seeker of freedom does not, therefore, aim at the objects aimed at by all simply, but at the objects towards which all wills converge as all become free. All aim at pleasure, for instance, but wills neither converge towards pleasure, which is an individual end, nor do they find freedom, but the reverse, in the pursuit of pleasure as their main object. Pleasure is a universal, but not a collective, object of desire.

So far as the other-will that surrounds each of us is concerned, freedom is the identification of all personal wills with an end or ends which is common to all seekers of ideal ends in so far as they are free. Such an end is the moral ideal—the ideal end that ought to be pursued in a community of persons—and is pursued by all seekers of freedom—as the natural ideal ought to be pursued in

the presence of nature. A man is said to obey natural law when he regulates his conduct with respect to the fulfilment by nature of her ends ; and, similarly, he is said to obey moral law when he regulates his conduct so that the moral ideal is not set aside by it ; and in both cases he may rise to a higher level of obedience by actively pursuing the ideals as he understands them.

The law is the means towards the fulfilment of the end. As for exact description of the moral end, and the content of the moral law in all its details, the one can only be described as it is fulfilled, and the other comes into existence as it is required by the needs of persons living in community. But in form they are universal : the moral ideal is the common end of those who pursue or can pursue ideal ends, and this includes all who possess the universal human characteristic of a capacity to have practical ideas and to act on them. The moral law is equally binding on all these in so far as they are equally free from the dominion of their non-rational selves and others ; while willingness in the pursuit of the moral ideal as prime end is binding with absolute equality on all.

The completely free man is, as we have seen, a self-conscious organ of nature carrying out her ends to higher ends implied in hers ; and now we see that the efficiency of his freedom in the discharge of this function depends on the unity of his ends with that moral end which ideally all men pursue, and really all who are finding freedom. His personal ends arising out of the peculiarities of his own personality are not condemned by the moral law ; he may pursue them freely, and develop his speciality in the pursuit, so

long as they are in harmony with the moral end: the world will be all the richer if his free personality make the fullest possible use of its freedom. The moral end is the universal end which the free man holds as supreme—the end in the pursuit of which he, with all other men, carries out most emphatically the joint purpose of man and nature; but his personal ends remain to him, in the pursuit of which he is his individual self, carrying out the joint purpose of nature, man, and self. After all it was the assertion of his personality that led to the absorption into his ideas of man and nature, and that absorption cannot destroy the factor of personality in all his ends.

Let us come more closely to the consideration of the moral end which dominates the ideas of free personality. It is the end which all men pursue, and towards which the wills of all converge. Now, throughout this whole discussion, the assumption has been implicit that the end which every man desires as a self-conscious being is his own freedom. His growth in virtue has been deduced from his desire for freedom, and the good man throughout has been identified with the free man. The justification of such an assumption lies in the fact that virtue and morality can be deduced, as a single movement, from the impulse of a self-conscious being to live freely in the presence of natural law and similar beings, whereas it cannot be deduced in the same singleness and completeness from any other natural tendency. Its final justification lies in the truth which is now evident, that the end of freedom which each man pursues for himself is an end to which the wills of all converge.

My sovereignty does not abolish yours, but establishes it; both are asserted equally in the pursuit of those common objects in which each is asserted separately, and the more completely I have identified my personal will with the will that ought to be universal, the more freedom do I leave for your will as similarly identified.

The object of morality, then, is human freedom—not simply equality of freedom for all, or the greatest quantity of freedom on the whole, but perfect freedom for every man. And this perfect freedom cannot be attained by any one until it is attained by all: the personal and the universal ends are absolutely identified in freedom. Each man pursues his own freedom in conjunction with various personal ends. If he identify his will with the will that ought to be universal he is ideally free from external compulsion; he is free in so far as the moral law or universal will is concerned. Nevertheless, in so far as the other wills which surround him are not thus ideally free, they are not identical with his true will, and make his freedom unreal by the clash of their false wills with his. Thus his real freedom cannot be secured till that of all other members in his community is secured also. *In so far as freedom is any man's ideal, his advance towards its realisation is bound up with the corresponding advance of all these others, and their advance with his.*

So the seeker after personal freedom completes his pursuit of the personal end by pursuit of the same end for all those in whose presence he lives. His impulse to attain freedom for himself implies, not only the development of his intellect, feeling, and will into

unity with the ends of nature and the universal end of man, but also the like development of his fellows. The development of these again implies that of all others who may be fellows to them, and so on till the impulse is seen to include all those who live, or can live, by ideas—the community of intelligent beings. Practically this is the whole human family, all members of which form a continuous whole, reciprocally limiting each other's freedom, and all capable, as rational beings, of merging their diversity of wills in a rational unity of end. Thus we are led to the idea of a universal community in the freedom of which each finds the accomplishment of his own freedom, and finds it by the rationalisation of himself and all, beginning with the circle of his immediate community and spreading outwards.

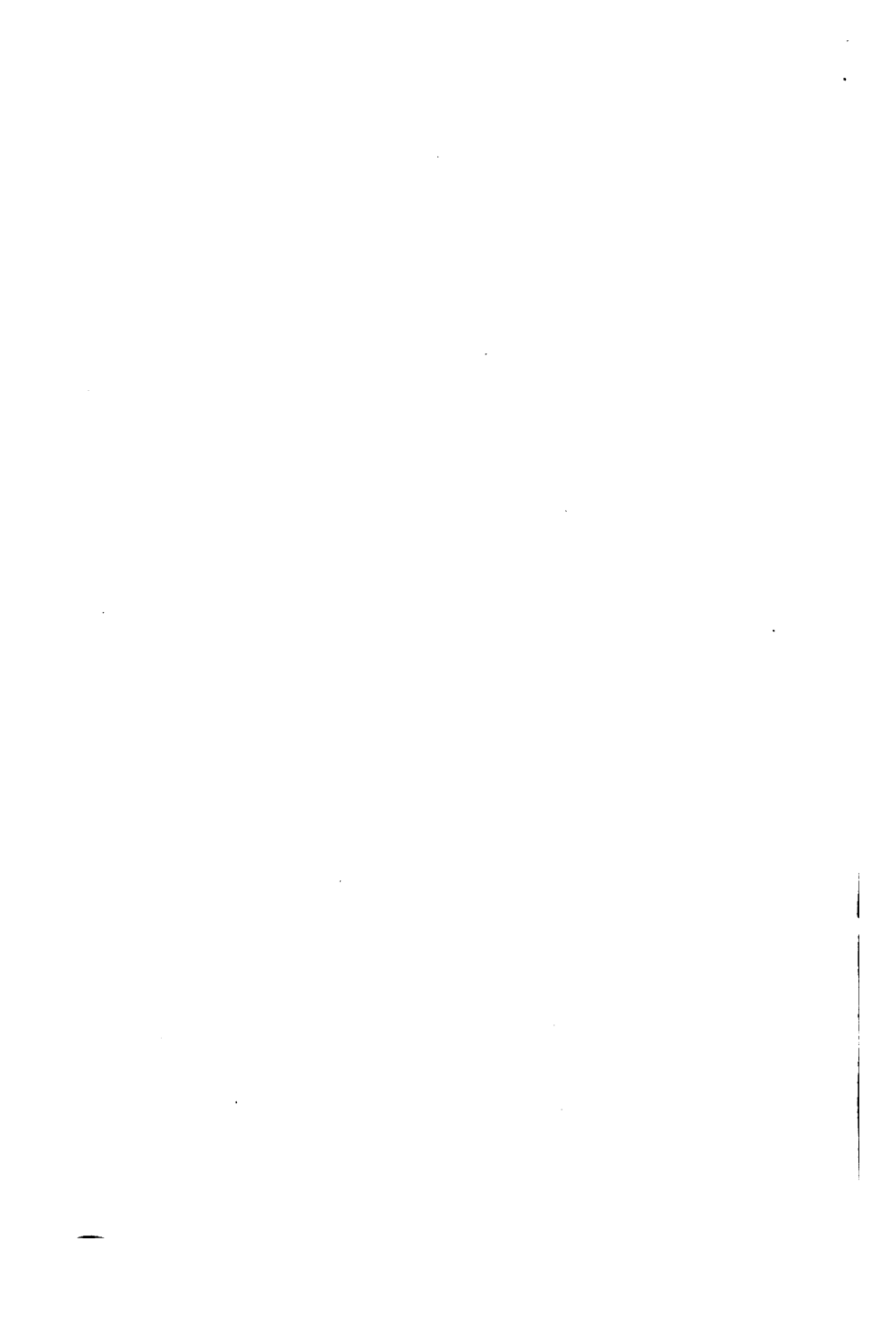
This idea is the inverse of the idea in which we have already found the universal community. In that it was the community of those who owe service as duty; in this it is the community of those who seek freedom. Duty is the service of freedom, and freedom is sought in the duty of service. Each idea implies the other, and is realised in the pursuit of the other. It is not surprising therefore that we should reach universality in the development of both. It should, however, be noticed that our conception of the free man's object is wider reaching than that even of the good man's duty; it covers the whole field of complete development for all members of the universal community.

But the universality of the free man's ideas and ends of conduct does not destroy their individuality. If it

were so, personal freedom would mean the destruction of personality, and this statement is almost a contradiction in terms. In truth, morality implies no tendency to the absorption of my personal ideas in the ideas common to all. It implies the contrary. Those common ideas originated in persons and are propagated by persons in other persons. If any man lay down his personality as an originator of ideas, he thereby ceases to contribute to the growth of the common stock : so far he ceases to serve others as well as to be his separate self. Humanity creates the great ideas in the service of which men gain freedom by the free growth of ideas in separate persons. The personal development of ideas is, therefore, no less the service due to all than it is the personal right of each. As man is the self-conscious organ of nature, so persons discharge that function of humanity by the free use of personal reason and of personal will. *To each man his personality is a gift in the use of which he fulfils his mission to humanity.* Such mission is at once his right and his duty.

PART II.

LOGICAL DEVELOPMENT





## CHAPTER I.

### UNITY OF MOMENTARY CONSCIOUSNESS : PERCEPTION.

WE have seen that the primary fact for ethics is the impulse of man, the self-conscious being aware of personal life and growth, to express himself freely in a life felt to be adequate to him under the circumstances in which he finds himself; and our developed conception of the moral end at which we aim, each for himself and for all, has been deduced from consideration of the conditions that are naturally fulfilled in the mind and character of the person who can and does so freely express himself in act. The normal person unfolds the manifold possibilities of his undeveloped character, by doing at all times that which he feels to be adequate to the whole of himself and to his circumstances. In such doing he realises himself and is satisfied.

But the characteristic fact of human, as distinguished from mere animal, development is neither the impulse to be, nor the satisfaction of becoming, the more developed self: these are the fundamental facts—the raw material—of development generally. The characteristic fact we have all along taken to be the process of development by action directed to an object or ideal end. We become

persons adequate to ourselves and appropriate to our world, by aiming at the attainment of results in the world and in ourselves of which we have an idea. The theory of ethics is the theory of the idea in the pursuit of which each man finds for himself, and, as we have seen, seeks for all, the highest good of perfect self-development. The realisation of this idea is the goal of universal development, and, with it more or less imperfectly formed in his consciousness, man proceeds towards that realisation. It may, therefore, fitly be described as man's explanation to himself of the facts of which he is otherwise only aware in the stirrings of voluntary action, and in feeling as approving or disapproving of his acts. And this explanation of his consciousness as practical, or emerging in conduct, is part of that wider explanation, which is indeed required for its completion, of the sum total of facts that rise from time to time on the horizon of consciousness.

The theory of logic, in the wide sense of the word, is the theory of this explanation which man, the rational being, makes to himself of that which, in the explanation, he calls himself and the world. The completely adequate explanation is true in the same sense as the completely adequate development is good; and with such true explanation only logic has to do. For us the inquiry turns in this case, on the normal process of true explanation by which the logical intellect works its way from the first dawn of intellectual consciousness towards the fulfilment of its labour in a perfectly adequate scientific experience.

The beginning of intellectual life is consciousness—awareness, we might call it—of an object. So far as self-consciousness accompanies this consciousness, the awareness is of self, the subject, looking at, or attending to, an object; and though self-consciousness does not always explicitly accompany consciousness, reflection always discloses the former as implied in the latter. A subject attending to an object—this is in all stages of intellectual life the starting point from which intellectual activity goes out; and the essence of every intellectual act lies, as we shall see more clearly later, in the process to which the subject subjects the object. And first the subject concentrates itself on the object in the simple act of attention. Without such concentration, it is evident that the object could not come under the ken of the subject, though the concentration may take place just as well in the form of attraction, or a drawing down of the subject's attention on the object as in the form of a voluntary pouring out of the subject's energy of appropriation on the object.

The subject *takes* the object in the act of attention, and the object is not strictly an object till thus taken,—apprehended—by the subject. In the cognition of the object we must, therefore, distinguish two constituent factors—on the one hand its formal or active factor derived from the activity of the subject in knowing it, and on the other hand its material or passive factor which the knower finds and makes his object of knowledge. This passive factor he finds ready-made; as thus made, it is for him the ultimate fact. However made, he, in his intellectual capacity as conscious knower, certainly has

not made it. It appears to him as a *don* on his attention, and in the act of attention it becomes his object.

It is, however, only the ultimate material of objects that the knower is thus obliged to accept ready-made. It will become evident later, but for clearness may be indicated now, that all the thinking of the thinker issues in the production of complex cognitive material which becomes an object to the subject in the act of attention. Of such complex material it is within the scope of logic to give an account; but the original material is ultimate for logic, though it falls to the lot of more than one physical science to assist in giving some account of the conditions, and, in that sense, the cause, of its genesis.

But, however constituted originally, the object-matter, as it appears in the object, is always the passive factor, the ready-made material, the given fact, which presents itself and is apprehended by the subject in the act of attention. The ultimate distinguishable units of thought are constituted by these two factors in every case, the impression or passive factor, and the reaction on it or active factor. Not that we can discern these factors separately, and afterwards unite them; from the very nature of consciousness it follows that they can not be discerned apart; but we may distinguish in our consciousness between variations in the vividness of the object as assigned to variations in intensity of one or other of these factors respectively. Indeed, as we shall see later on, this is but a special instance of the double factor which governs the whole of thought and constitutes the very idea of intellectual life.

Bearing in mind that we never perceive the passive factor, let us call it, since we must call it something, an impression, or claim on attention. Intellect begins, and therefore logic, in definite response to that claim. This is attention, the selective act in which the mind takes a given and contemplates it singly. At this point one characteristic mark of a good intellect is to be found. This is *sensibility of attention*—readiness to respond, to take the given—which is not the same quality as sensibility of sense. The given as given is beyond our control. Since impressions are known to vary with sensory stimulation, and the senses are stimulated according to circumstances, while the sense-organs vary in sensibility from person to person, the given as given will vary according to circumstances and to the more or less perfected, or perhaps excited, condition of the sense-organs. But to most persons much is given that they neglect to take.

Moreover, when the *disposition to take* rises to a certain height it passes over into an *ability to find*: the act of attention intensifies itself into an act of penetration, and latent object-matter is thereby fetched, as it were, to the surface of consciousness. Sensibility surpasses itself in becoming penetrativeness. Thus the responsive mind becomes capable of penetration, and, because capable, disposed to search or penetrate, for the general reason that success begets desire for more success. It is more important, however, for the educator to notice that this order of involuntary development in capacity implies the reverse order of voluntary self-development, all the operations of attention being under the control of the will. Thus the

will to search begets the disposition to find, and this improves the readiness to take, improvement in the giving faculty of sense being also implied in continued exercise of such readiness. The distinction between the comparatively passive observer who sees without any voluntary effort of looking, and the active observer who sees because he looks, is very important in educational practice. The latter sees by an effort of will ; and the teacher works by means of a play of motives on the natural capacities for making such efforts. The mind well-trained in this respect is the mind that can look for itself, under the leading motives with which it identifies its will. In general, as in this case, each involuntary excellence of intellect is related as cause, and also as effect, to the corresponding voluntary excellence which it tends to produce, and which tends also to produce it.

Returning to the fundamental fact of responsiveness, we must now notice that the subject may respond to the object-matter presented in more ways than one : it may grasp the given, or the given, ungrasped, may fill it. In the latter case the given is not, properly speaking, taken at all : the logical subject is submerged in the wave of disturbance which sweeps over the conscious subject generally. This subjective disturbance which is the negative of objective knowledge, though normally accompanying it and accompanied by it, is *feeling*. In feeling the activity of consciousness is subjectwards, in knowledge it is objectwards. In feeling, as feeling, the object-matter of knowledge *affects* the subject, but is not taken as an object of knowledge by it. The response of the mind to the given by way of feeling is,

therefore, a background to intellectual activity indeed, but not a possible object of it. Object-matter, however, may make itself *felt* before it makes itself, or rather is made *known*; and the pressure of feeling, or its excitement, may induce reaction of the subject in the definite and knowledge-producing form of attention. What the mind has not yet grasped, or fails to grasp, it may feel; and the importance of feeling, as the witness to that in the given object-matter which passes out of the intellectual grasp, cannot be over-estimated. Nevertheless, it is the natural aim of the vigorously developing mind not to rest in feeling when it is possible to know: to the progressive intellect mere feeling is the failure of knowledge, which failure it is bound, not to deny, but to overcome.

These reflections suggest an intelligible account of over-emotionalism as the indolence of the mind to think out its consciousness when it can, and of under-emotionalism as the habit of the mind—perhaps another kind of indolence—to lose sight of whatever it cannot grasp as an object of knowledge. The practical lesson is that persons should be encouraged, neither to stifle their feelings nor to revel in them, but to think them resolutely into shape. In the higher and more complex stages of mental life, the practical significance of such general procedure becomes considerable.

In the logical sense, then, the given is taken only when it is grasped by the subject and set out face to face with it as the object of attention—a selected part in the sum-total of consciousness. Consciousness is evidently a condition precedent of attention: we are conscious

each one of us at each instant, of a certain whole—the momentary field of consciousness—and when attentive, or at least when voluntarily attentive, we are subjectively aware of the attentive strain in us, and objectively aware of intensified consciousness at one part of the whole field. Out of the given whole we select in isolation one part. But if that act of selection results in, or is followed by, loss of consciousness in all the remaining field, then, as it were by the opposite extreme to inattention, we reach a mental state in which the object overmasters the subject, and feeling, not cognition, is the result, though in this case the feeling has a *definite* objective origin. Clearly then, an object cannot be said to be grasped by a subject unless its selection as the object of attention is accompanied by the consciousness of other objects, which are in a manner attended to in the same act. In the primary intellectual act which is our logical unit, attention is focussed on some selected part of a whole variously attended to but uniformly liable to attention; and the part is apprehended in relation to the whole under the unity of a single continuous consciousness. No part can be selected from this unity that is present in the initial stage of selection, without being, at the same time, assigned to a position in it made definite by the relation to this part of other parts which are equally objects of possible selection. Thus the selection of a part implies the shaping of the whole, the construction of a shaped whole out of all the parts. The facts of construction and selection are co-results of the single primary act of attention, tending finally to the transformation of raw material into an articulated system of knowable experience.



We come to apprehend our impressions by thinking each as related to others. At this point a practical inference suggests itself. By thus grasping our impressions, as parts in a whole which we construct, we overcome them as mere claims on our attention tending to overmaster the whole, and use them instead as material for our logical activity. If the impression is allowed to affect us as a mere claim, it tends, as we have seen, to submerge intellect in feeling. We may seek to escape by denial of the claim, as seen in efforts to resist the distractions of a barrel organ played in the street, or an attractive object visible from the window : or we may escape from the claim by using it as matter for thought. Since this latter and normal course is not always convenient, it is important to secure, for children especially, moderation in the number of claims made. Otherwise, a child is driven to take refuge in resistance to presentations, and thus slowly destroys his character of readiness to take : he acquires in fact a pernicious habit of barely touching without taking, and thus learns to approach habitually as near as possible to the attitude of passive reception. Presentations in excess of our available will to think them are worse than useless ; they are actual obstructives to intellectual development. Just as it is important to secure moderation in the number of social claims made upon an immature personality in the case of normal ethical development, so is the like moderation important in the corresponding logical case. To use a metaphor borrowed from physiology, the mind takes no notice of intellectual or moral food in excess of its digestive powers ; and the constant

repetition of this negative attitude towards proffered food issues in a habit of rejecting food on most occasions. This is the essential evil of all that goes under the name of 'cram.' Persons brought up in large cities are liable to 'cram,' from the very nature of their circumstances. Hence it would seem that town children are liable to a development of stupidity more melancholy than that which befalls the country children: and this does, I think, take place though the fact is disguised by concomitant facts of an opposite tendency. The stupidity which comes of intellectual 'cram' is analogous to the stolidity which comes of moral 'cram.' This latter evil attacks those classes of society whose burdens surpass average strength, and whose average member falls back therefore into the ranks of the merely suffering—bearing, not only the excessive, but all burdens passively, without attempt to deal with them actively as duty-calls. Out of such circumstances issue alike the hero, the criminal, and the mere incapable. Among the comfortable classes, on the other hand, not cram, but starvation is the more common moral danger.

In the mental state which we describe as that of a subject attending to an object, the subject becomes aware of the object as a part which it discriminates from other parts in the whole of consciousness—the field of presentation as it has been well called, and, at present, we are considering especially the field of sensory presentation. By the act of attention, the subject groups the whole contents of consciousness round the object attended to, and is aware of it as the *instantaneous centre* of the group so formed. If there were at the beginning of the

attentive act anything in consciousness which did not fall into the group, it will have fallen out of consciousness at the end of the act. Attention might be described indeed as the complete co-ordination of consciousness, and involves the disappearance of elements unfavourable to co-ordination—distracting elements. In this co-ordination of consciousness, and neglect of irrelevant elements, we may see the essential features of all logical activity. Here we have the first step towards explanation of the total given as a connected somewhat, a step which is directed towards solution of the question ‘What is this particular given, among other givens?’ The first part of this question is explicit in the mental attitude, as anyone can see by observing himself in the act of attention to a presentation; and the second part is implicit, since there are no other terms in which the answer can be made than those supplied by its relation to other givens.

But in the act of co-ordination the subject deals with a great deal more than is present in the presented field at its beginning. An event that might be fitly described as an awakening takes place; there is a coming to consciousness, not only of new presentations before unnoticed in the sensory field, but also of old presentations in a changed state, known as revivals of past impressions, and distinguished clearly in character from present impressions. These revivals which represent the past might, perhaps, be characterised most aptly as apparently emerging on the field of consciousness in an opposite direction to sensory impressions; and the use of the two words impressions and revivals corresponds to this diffe-

rence of direction fairly. An impression which has been attended to does not remain on the surface field of consciousness after attention is withdrawn, but may be conceived as continuing its course in the same direction, and therefore to a place behind the field. Thence it returns, if it has not sunk too far, under the conditions of the event which I have called an awakening of consciousness.

The awakening may be general and indiscriminate, as under circumstances of strong emotional excitement, when revivals take place promiscuously, and when, without the conjunction of strong voluntary control, intellectual confusion is, therefore, liable to occur. Or the awakening may be partial, and strictly limited to the intellectual purpose—a scarcely conscious purpose—before the mind. This purpose in the case we are considering is the reference of the object under attention to some definite position relative to the whole contents of consciousness, constituted at the instant by revivals as well as presentations. We might speak of the awakening as a strictly logical one, if it resulted in the revival of all those elements, and no more, that were necessary for the intellectual purpose. In general, it cannot be too carefully borne in mind that all intellectual activity is not logical, but only that proportion which directly subserves the purpose of knowledge, the explanation namely of the contents of consciousness.

If all awakenings were strictly logical, it is evident that the production of knowledge would so far go on mechanically; there would be no room for choice of elements in the work of co-ordinating consciousness. This, however, is not the case. Nor is it the case that

a general awakening takes place spontaneously on all occasions—that the mind turns out all its stores, and selects the necessary elements. To describe the event that does occur the more intelligibly, let us use freely the metaphor—scarcely to be avoided in logical explanation—of a surface on which objects, presented or re-presented, are displayed under the gaze of an attentive subject, who sees nothing, either on what he conceives to be his own side, or on the opposite side of the surface, but all objects as actually on it. Now impressions coming from the outside cause a disturbance among the material of possible revivals on the inside, such that a presented object A attracts to the surface and causes to be revived on it the re-presentation of a similar object A' which was formerly presented. These two, A and A', we may picture as emerging on the surface from opposite directions at the same point, and therefore as identical. But A' was originally submerged as one of a connected system of objects with which it was associated in the act of its apprehension. The partial disturbance of sub-consciousness caused by A, which revives A', revives also these associates. The tendency always is to the revival of a whole when there is revival of any part. Thus the presentation of any object tends to the re-presentation of other objects peculiarly suitable to assist towards the required explanation of its permanent significance; and yet there is ample room for the revival of the irrelevant, and therefore abundant occasion for choice among the elements revived.

Before we go on to consider the law of logical choice, let us pause to discuss a common practical difficulty.

It may happen that the mass of re-presented elements which ought to be reinstated by A through A' is not reinstated. Minds differ in nothing more than in the revivability of their impressions. In some cases, no doubt, impressions sink towards the limit of forgetfulness rapidly, and, as they approach that limit, a greater disturbance is required to revive them. In other cases possibly, the new impressions are deficient in vividness, and, therefore, in attractive force. And lastly, the mind of the individual may offer an unusual resistance to disturbance.<sup>1</sup> But, for whatever reason, the representations that should come up may possibly not come up. If they do not, can the individual do anything to cause their emergence? This question is practically important and admits of an affirmative answer. Just as the *given* has often to be found by the steady fixed gaze of attention outwards, so the *associated* has more often to be sought, by successive fixations of attention at various points of the presented total, till, perhaps after the failure of several experiments, trial of the point that has concealed associations is made and the associated elements fetched to the surface. Introspective observation seems to show this fetching to the surface as effected by a certain concentration of attention on the point A, which results in a recession of that point *inwards*, till A' is reached, and with A' the associated whole, consciousness having receded to it. Just so attention moves *outwards* to reach the sensory given. The special interest in the case now considered is not the concen-

<sup>1</sup> These three cases might be summed up under the names of forgetfulness, dullness, and stolidity respectively.

tration of attention on one point, but the *movement of attention* over the field, making trial of successive points till that one which is productive of useful associations is found. Such a search implies two modes of failure at least: it is possible to fail in the necessary degree of concentration at each point—to flit too much: it is also possible to fail by over-persistence in concentration at particular points—to flit too little. A sound mind is both lively and persistent, and is neither impatient nor obstinate. The teacher of elementary geometry, in training his pupils to solve problems and discover proofs, has abundant opportunity for observing the peculiarities of individuals in these respects, though at a higher stage of intellect. A general theorem appropriate to the case in hand has to be found. To the best minds it comes up of its own accord, so far as they know; the others sit still and think of nothing. The foolish teacher sets these down as boys, or girls, who cannot discover, and shows them straightway how to do this impossibility. The wise teacher suggests direction of attention to hopeful points, and is careful to limit suggestion to the necessary minimum; one of his broadest hints would be to ask whether a certain given fact did not suggest some piece of previous knowledge. Moreover the teacher who thinks much about his pupils' minds will endeavour to find out any tendency to characteristic defect, and make it his purpose to encourage the kind of action which is calculated to remedy the defect. He will see that one learner persists in returning to a wrong start, even after he has been induced to try a different one. He will find another passing rapidly from

expedient to expedient, and unable apparently to fix his mental effort anywhere. And it is clear that in these discoveries he has already laid the foundations of an attempt to cure incapacity.

So far we have considered objects as brought into consciousness by concentration and movements of attention, and as implying a co-ordination of consciousness round them. When this co-ordination is complete they are *perceived*. In other words, the question is then answered which was asked, and the subject *knows* the object as having a relation to its other objects. *It was discriminated from its surroundings when the question was asked: it is assigned a definite position among them when the question is answered.* This is perception; and we have now to consider the logical nature of the perceptive act. What is it we do with a mass of new impressions when we perceive them correctly as constituting a perceived object, or with one impression when we perceive it as part of an object constructed for the most part out of representative elements?

The answer to this question can only be found by considering the character of the final whole when constituted. We know that wrong perceptions occur, and are afterwards rejected—that a sheep in the distance may first be perceived as a dog, for example, or one man taken to be another. Mistakes occur, and after more attentive consideration are corrected. True perception under difficult circumstances implies a conscious process of trial and error. The conditions to be applied, therefore, are those of the true percept. If the percept will stand the test of a steady dispa-



sionate mental gaze, it is a true percept and logically constructed. We have to inquire then into the conditions which a constructed whole, grouping together presented and re-presented elements, must fulfil, in order that it may not fall to pieces under this steady gaze.

Let us return to the metaphor of the surface continuum which is more than ever valuable for the explanation of these conditions. Coming from opposite sides, A the presented, and A' the similar re-presented, elements fall at identical points in the continuum and are superposed. B, C, D, etc. the concomitants of A, impressed with it, fall at points definitely related to the position of A; and B', C', D', etc. the concomitants of A', revived with it, take up positions with respect to A'. Now it might happen that two of these elements coming from opposite sides should fall at the same point of the constructed whole, but not be similar—that is identical in quality. In such case, the whole is self-contradictory at that point. The two elements are mutually contradictory; they cannot superpose and tend, therefore, to blot one another out. Normally the presented blots out the re-presented element, and, with it, repels its associates from consciousness. Just as the similarity of A to A' causes the rise of the latter and its associates to the surface, so the dissimilarity of B to B' tends to cause the submergence of the same group. The attempted conjunction is said to be inconsistent, which amounts to saying more definitely that one of its points is self-contradictory. Two different elements have come together at that point; so soon as attention is directed to it this becomes

evident ; the subject selecting each effaces it in the same act by the selection of the other. Thus, under careful survey, the illogical whole falls to pieces, and the mind is set free for a fresh start.

While busy with my own thoughts and comparatively inattentive to external impressions, I become aware of an object at a little distance on which my attention very slowly fixes itself. I am with a number of persons sitting in a room, and I am aware of this object as at the general level of the persons' heads. I take it, while still absent-minded, to be a bonnet ; and this implies the rise in my consciousness of certain representative elements making up my idea of a bonnet. Still looking at the supposed bonnet, I become aware of a distinct contradiction between its general shape and the shape of my represented bonnet. Speedily, my attention is thoroughly aroused, and the bonnet disappears. I find myself looking at an old gentleman's bald head. In this real event, we have, I think, a useful example of false perception and the normal process of its correction, because the observer's state of absent-mindedness caused extraordinary delay in the succession of stages and made after-observation the more possible. Even the becoming aware of contradiction was a slow process, beginning with a vague sense of oddness, passing into wonder, and not resulting in rejection till attention was fully roused.

We are now in a position to sum up the results of our inquiry in a statement of logical law. In the first place, we notice that no object can be perceived except as an element in a whole which the subject refers to objective reality. In the second place, we see that a fundamental distinction exists between presented and

re-presented elements, and that presented elements have their position in the whole assigned by superposition on re-presented elements, the position of which is already assigned, presumably, by their history. Every presented element has a place corresponding to it in the mind's whole which may be defined positively by a re-presented element *a*, and if not, can at least be defined negatively as not-*a*. Every selective act of attention must place its object somewhere either on the point *a* or in the vague space not-*a*. And this is expressed in the well-known logical law, *everything is either a or not-a*; in other words the sum of the *a*'s and not-*a*'s make up the whole of possibility.

The conditions of consistency which we have observed are definitely stated in two other logical laws, which may be expressed as follows: (1) *a may be selected again and again with result simply a*: (2) *a and not-a, if selected in the same act, destroy one another*. Subject to these logical conditions, and limited by psychological possibilities, the constructive operation is *free*. This freedom however amounts simply to the ability of the subject to concentrate attention, and to move the focus of concentration from point to point.

Once again we should notice a very important fact, the educational bearings of which are manifest. Logical law is made operative by correction of constructions that will not stand its tests. In perception, and, as we shall see later, in all logical activity, progress is made by trial and error: we first make what we can,<sup>1</sup> and then cancel whatever does not stand the

<sup>1</sup> This language might seem to imply assumptions as to an *entity* behind consciousness which makes it what it is. Neither here

test. As time goes on, we come with practice to correct error more rapidly, and even to inhibit it at its sources, or, as we might say, to correct it sub-consciously. This habitual inhibition of error is characteristic of a mind that has gone through a close logical training.

While on this subject a common kind of intellectual feebleness may be noticed, which turns on the fear of temporary error. Under this fear, or shrinking, the mind inhibits its nascent contents all round, and produces nothing which it can either accept or reject. The vigorous mind produces error rather than nothing, and the critical mind corrects results. An over-criticised mind is apt to grow fearful and depressed. The wise teacher metes out his criticism, therefore, with discrimination, giving much to the bold and uncritical and little to the timid and over-cautious, while he makes it his special aim to encourage *self-criticism* in the one and *enterprise* in the other.

We may now take stock of our results as educationally interesting. In a sound perception there may be distinguished four mental operations or events which cohere normally into a simultaneous whole; (1) attention to the presented elements; (2) the search of attention—fetch of imagination—which issues in the revival of elements<sup>1</sup> necessary for the construction of a perceived nor elsewhere do I make any such assumptions, the discussion of which belongs to Metaphysics, whereas we are concerned only with psychological fact, and our language with psychological description. Thus 'we' or 'I' means simply the activity of consciousness as shown in all degrees of attention and its movements.

<sup>1</sup> These elements supplement those presented, and assign them to their appropriate place in the mind's whole, as constituted by its past history.

object; (3) survey of the whole, which is at once the constructive and the perceptive act proper; (4) correction in case of error, which is effected by rejection of inconsistent wholes. It will now be sufficiently evident that the performance of the first three operations is largely under the control of the will; we can will to attend, to search, and to survey. It remains to inquire about the fourth; if we do not feel the contradiction, how can we make ourselves feel it? All we can do is all we need do—to survey the percept till we do feel it. This is quite enough; there does not exist a person who can take black for white when he steadily sets himself to look. The difficulty lies in the steady survey by which point after point of the perceived whole is tested; the remainder is out of our power, but certain to happen. *If we have perceived in the complete sense of exhaustive survey, then the logical test of consistency has fulfilled itself.* Haste and an unsteady attention are among the most common causes of logical failure. They divide the field with unreadiness in initiating movements of attention and slowness in carrying them on. Thus intellectual excellence divides itself already into the various excellences of *persistent concentration*, *ready initiative*, and *liveliness of movement*, all these being considered at present as excellences of spontaneous attention, and all being liable to increase by continual exercise, which exercise is under the control of the will. So the mind feeble in these qualities can efficiently purpose to improve itself, and can be helped to that purpose by the educator.

Besides these excellences which are directly capable

of increase by voluntary effort, there are certain fundamental excellences, not directly subject to the will, in the degree of which minds differ considerably. These have slightly been indicated, as occasion arose, in the preceding pages. The sensitiveness of minds under the same quantity of external stimulus is of very variable degree; but this sensitiveness is to be clearly distinguished from responsiveness to sensory claims, which depends on the habitual direction of the attentive strain, and comes therefore under the control of the will through considerable intervals. A still more striking characteristic turns on the greater or less readiness with which the representative world tends to emerge on the field of consciousness. The lively mind<sup>1</sup> keeps up, as it were, a continuous activity, and turns out its store of ideas on slight occasion, or spontaneously in all probability when no occasion arises. Contrasted with this is the mind that yields up its re-presentations, even for the evident explanation of its presentations, slowly and with difficulty. Such a mind cannot readily put its impressions together, because the earlier impressions are not easily revived to take their places by the later ones; this unreadiness, and its cause, become very evident in the higher stages of intellectual life. At present, it will suffice to notice the bearing it has even in the early stage of perception which we have now reached.

So far our notion of a true perception is that of a

<sup>1</sup> We might perhaps call this the wakeful mind, since its characteristic is readiness to bring its contents to clear consciousness, which suggests that the slumber of unconsciousness holds them but lightly.

complex and logically constructed object, with one or more of its points presented and all of them re-presented. The subject refers it to an *external reality* as possessing elements which come from the sensory side of consciousness, and he perceives it an *intelligible object* for him as being assigned by its representative elements to a definite position in the possible whole of representative consciousness. Our analysis of a logically constructed object shows it to be one which hangs together—a whole in which each constituent element does not contradict itself by the superposition of unlike presentative and re-presentative factors. Thus a logical object A may be described symbolically as of the form

$$A = x + y + z + \text{etc.},$$

where any term containing two factors (presented and re-presented) must be of the form  $aa$ , and stands as  $a$ , while if any term takes the form  $a \text{ not-}a$ , it vanishes, and by its vanishing destroys the whole which is organically connected with it.

Here, however, an important remark must be made. It is quite possible that the conditions of logical consistency should be satisfied, and the requirements of truth, nevertheless, not fulfilled. A delusive appearance of consistency is often obtained for false perceptions, by an almost wilful neglect to attend to certain elements implicit in the objective consciousness and only failing to become explicit by neglect of the attentive act. These elements may belong either to the sense-presented or to the re-presented part. By not attending to the former, the clue to the whole truth is lost; by not

attending to the latter, something not the truth may be allowed to stand. In the first case, the object as perceived is inadequate to the whole available truth; in the second case, implicit contradictions pass without detection, and the perception is actually false. The remedy lies in an *honest* look at the facts offered—not indeed the steady gaze already noticed which brings out logical error, but the wide sweep of attention which carefully surveys every nook and cranny of the whole. This contrast between the steady gaze and the wide survey is, in general, that between logical accuracy, which may be narrow, and broad perceptiveness for truth.

A little reflection makes it evident that no absolute guarantee against either of these liabilities to error lies within the reach of the will. There may be implicit elements attaching to the perceived whole which vitiate its truth, either as adequate or as consistent, and which the impartial survey of attention does not reach. Liability to error is in this region of perception a fact which it only remains to each person to minimise as much as possible. And a good deal can be done, however much remains.

Finally a true perception may be defined as a self-consistent complex object of consciousness, adequate to, and limited by, consistency with the presented elements in which its content originates, and to which that content is referred, while to the re-presented elements it owes its intelligibility as participating in the mind's previous whole or *experience*. Such a perception is, at least, as true as it can be under the circumstances of the individual mind.



## CHAPTER II.

## ARRANGEMENT OF EXPERIENCE : CLASSES AND NAMES.

WHEN a strange object presents itself to us, and we attempt to 'take it in,' we are hindered by the fact that it connects itself with no group of representations already latent and connected in consciousness. It cannot be taken in and placed in the centre of a consciousness converging on it, if there is nothing potent or latent in that consciousness to which it can be initially attached. To an adult mind, indeed, it can, however strange, be apprehended as having form and colour, and, therefore, a place in the form and colour continua of consciousness. But to an infant mind even this would not be possible, since the most elementary continuum, to places in which presentations can be referred, can only be formed by the re-placing in it of former presentations, and the blank infant mind is prior to the consciousness of presentations altogether. To such a mind how is perception possible? Metaphorically speaking, the subject cannot build up a perception out of presented material without a *known* space in which to build; and this implies previous and still, in some sense, present knowledge of points in that space. The sense-presented material

gets into that space, and becomes a perceived object, by superposition at one or more of these points—by logical identification with re-presentations—and cannot otherwise: thus A cannot get into the space, except by partial identification with B, which therefore, it would seem, must be already there. How then did the first B get into the space?

The metaphorical space referred to let us call the logical space, since, including all conscious possibilities, it exceeds the limits of consciousness at any moment, and cannot therefore fitly be called the space of consciousness: all our knowledge exists for us duly ordered in this space, and capable of rising to actual consciousness on due occasion. This idea of a logical space is only a metaphor to assist the conception of that process by which experience is built up, as the total in which all past states of consciousness are latent; but it is a convenient metaphor. Our question now is—how did the first experience get a footing in this space, since only by its rise to consciousness can the second be established.

A somewhat similar question has been asked and answered already. That question referred to the difficulty of conceiving that a presentation should be present and yet not in consciousness. The solution was suggested in the conception of a presentation-whole mainly sub-conscious with a strand of consciousness stretching through it. In a similar conception we may find the solution to our second question. This is the conception of a sub-experience, organically connected though not organised in the psychological sense, which grows into

experience, and the possibility of acquiring new experience, simultaneously. In simple words the conception amounts to this :—there is a period of sub-intellectual life during which vague undiscriminated impressions flow in upon us and affect consciousness, though not presented to the subject in its cognitive attitude of attention. These mere impressions survive, and are revivable, just as presentations are : so that, before re-presentation is possible and makes presentation possible with it, there is a whole of impression, mainly sub-impressed, or latent as one may say, and capable of being re-impressed. Now in such case all that is lacking to transform impressions into presentations is the concentrative act of attention. The material for re-presentation is already present. The material for presentation emerges in a sensory impression upon which attention fastens at its awakening, and in the same total event of mind the corresponding re-impression, with its associates, takes place and is attended to. In this total event the impression and the re-impression are no longer such, but presentation and re-presentation respectively. At the very beginning these two events occur together ; and there can be no doubt that similar double events occur frequently at later periods in many minds, especially when new departures in the pursuit of knowledge are made.

Thus the first A does not get into the logical space by identification with A', any more than A' gets into that space by identification with A. The presence of A transforms A' and its associates into a selected piece of consciousness, in relation to which A is cognised and with it A'. Henceforth, this perception is a permanent

item of experience, having a position in the logical space with reference to which new objects may be perceived.

The period in which the subject does not attend, but is affected, probably does not altogether pass away for most persons throughout the whole of life, but continues at certain points while far surpassed at others. It is important for the teacher to notice this. In the more advanced stages of intellectual life, events occur of a more or less complex character similar to those just described, and occur normally. Throughout, there is a tendency, in the ordinary mind at least, for ideal life to be preceded by sub-ideal life, in which preparatory processes of accretion and assimilation are carried on that result in the coming to consciousness of ideas later. Impressions are at first relative to this sub-ideal life, and modify it. By repetition of impressions accumulation of energy at certain points is caused, till at last a new impression of a certain kind is enough to awaken attention and thereby consciousness of the total idea. The sub-idea  $A' + . . .$ , reacting on the impression  $A$ , becomes the idea. This is a significant fact for the educator, who, more than most others, needs encouragement to believe that when he casts his bread upon the waters it will indeed return after many days. The illustration that occurs to me most forcibly is that of the effects produced by school-discipline on the minds of those who at the time seem to evade its educational influence completely. In this case there is a decided voluntary resistance to the perception of the lessons, or rather meaning of the lessons, taught. The actual facts are perceived, but the idea which the normal child forms of his relation to the

discipline is not formed by this child. Relatively to this idea the facts are impressions only, unperceived, not apprehended for what they are. Some day, however—it may be in after life—events occur which bring up all these past events with them into a clear relation to the individual life. The remembered events were elements of a sub-idea, as for instance the general idea of personal responsibility for the well-being of others, and were as necessary for its coming to consciousness as were the later events on the occurrence of which that coming occurred.

Enough has probably been said to elucidate sufficiently this difficulty as to the origin of perception ; and attention has, I hope, been drawn to the practically significant fact that perceptions continue, more or less, to originate in this way long after it has ceased to be the ordinary way in the developed mind of the adult. Let us now return to the consideration of that ordinary way, with a view to the discovery of the further intellectual processes that are implied in it and become explicit with development. In the act of perception AB is cognised by re-cognition, or, as at the first, cognition of A C', and both are cognised as partially identified with each other. After the perception, therefore, they naturally survive re-representatively as amalgamated with each other, and are henceforth, while remembered, partially superposed elements of the experience-whole. When, later, AD is perceived, it is assimilated to both of them, and sinks with them into experience : and similar remarks apply to all perceptions into which A enters as an element.

Here we have clearly the beginnings of classification

—purely spontaneous and unintentional at first, but still classification : AB, AC, AD, and all the others assimilate with respect to the identity of A, and, continuing the metaphor, gravitate towards the same point in the logical space, the point appropriate to A. Thus situated together, superposed on the A-line of direction, B, C, D, etc. extend around the centre A, and are less emphasised in consciousness, even if not altogether lost sight of, whenever the complex representation rises to the surface in response to a new presentation of the same class. Now any one of the class such as AB when it appears as a re-presentation is called an image of a percept, or particular image. The *logical class image* is essentially, on the other hand, an image of the class characteristics, i.e. of A; though in all revivals there is a tendency for some characteristics of the particular images to revive also. Thus in the perception of a cat the class image of the cat which rises to consciousness may include remembered particulars of the most interesting cat previously known, as well as the general characteristics of cats, and it will in this case naturally include particulars of cats specially resembling the perceived one. We may distinguish, and it will be convenient to do so, between the psychological generic image, as it is generally called, which includes a variable and contingent host of particulars, and the logical class idea which does not, and which, if it never occurs in its bareness as an image, at least tends to occur, the psychological image becoming more and more shorn of particulars the more scientific, or strictly subservient to

knowledge, its occurrence is. The relation here suggested between accurate knowledge and non-particularity is one of far-reaching importance, and will claim our attention in various ways later.

In the early perceptions belonging to a class, the coupling of past and present experiences takes place with evident consciousness of both re-presentative and presentative elements. But as experiences accumulate, and the logical class idea grows more distinct, and, therefore, the mass of particulars which surround it comparatively more shadowy, the act of perception is performed towards new presentations with continually less consciousness of past presentations, either as a generic image or as a series of particular images. The logical reference of the new object to the class takes place with more precision than before and more rapidly; but the psychological facts are modified. Re-cognition has become certain and swift by exercise, and attention is, therefore, withdrawn from all its processes except the necessary process of admitting new presentations across the threshold of consciousness.

Yet once again we see that the notion of this admission implies the presence in consciousness of some mark to show where the place of admission is. The class image may not rise, nor any image of the class; but some sign there must be in consciousness, from the re-presentative side, of the place to which this new object is assigned. Just as I can localise a touch on the tip of my finger by awareness of what is called the local sign of that part, so I attend to an object, and know what it is relatively to my whole experience, by

my awareness of something that is metaphorically a local sign for it in consciousness. In our metaphorical description it is implied that all objects belonging to a class enter consciousness at a definite point, travel downwards in sub-consciousness along a line intersecting the surface of consciousness perpendicularly at that point, and revive along the same line in the opposite direction. The local sign, then, for each class attaches to that point, and attaches in such a way that a presentation at that point revives the sign, and is known for what it is by that revival.

The most usual kind of sign is a name. Let us consider, then, the details of the process by which names are assigned to objects in the first instance, and serve afterwards to facilitate the discrimination of new objects as belonging to a class. 'A name,' says Hobbes, 'is a word taken at pleasure to serve for a mark, which may raise in our mind a thought like to some thought we had before, and which being pronounced to others, may be to them a sign of what thought the speaker had before in his mind.' For the moment we are specially concerned with the first of the two functions herein assigned to names, namely the marking function, and with a view of the purpose to which that function is put slightly different from, though by no means inconsistent with, the view Hobbes had in mind when he wrote the definition. A name does indeed serve as a mark to raise a thought in the mind of speaker and hearer; but it also serves—and herein lies its liability to abuse—as a substitute for re-presentations, when, by means of attachment to it, a new object is assigned to the same class



as other objects of past experience, to each of which also the name has attached, and all or any of which its sound, or pronouncement, does tend to revive. The liability to abuse is very evident in such an imaginary conversation as the following. Pointing out a certain object, the teacher says to the child, 'What is this?' Now the child cannot assign the 'what' of the particular 'this,' unless its presence arouses, or would but for the intervention of the name arouse, re-presentations of similar objects; and if he give the name, the possibility of such re-presentations is implied in it; their suppression is merely economy. If the child's incapacity be due to dullness, he will naturally be silent. The teacher, anxious to instruct but careless of the difference between dullness and ignorance, foolishly goes on to say 'It is,' or 'Don't you see that it is, a picture of a house.' The child assents, calls the pictured object 'house,' and, since he is by supposition a dull child, does not bring to mind the real houses of his experience, as he should do if the name that came so slowly is to be made a living reality for him. As he uses it, it is dead, and he is neither wiser nor brighter. A wise teacher would have been careful to note the fact, supposed to be evident from previous experience, that the child was not merely ignorant of the name. He would send the child to look out of the window into the street asking him to find something like the picture, and, having found it in the opposite houses, to name it. If the object were such that ignorance of the name might be quite possible, the wise teacher would still withhold it till the child had given clear evidence of identifying it partially with something

or other in his past experience. A tiger may be called a big cat or even a cat; a leopard may be called a spotted tiger. Or, if names rather than ideas fail, the question can still be asked, 'Have you ever seen anything like this, or of which this reminds you?' Then when evidence of genuine perceptive activity has been given by the child, the teacher should supply the new name, taking care, also, to bring out its relations to the names of the similar objects, if there be any known.

Every object should be looked at and assimilated to past experience by the looker, before a second person ventures to supply a name, which otherwise may serve as a cloak for the omission of all that is most essential in perception. The child who is slow to assimilate the object to that mass of underlying experience which constitutes the corresponding idea is the child who is slow to name, and is the child also most likely to be injured by the supply of the name from outside before he has touched on the idea. The caution here, it will be observed, is not simply that implied in the phrase 'Things before words,' which is the motto of a well-known band of educational reformers. It is rather expressed in a motto which touches, I think, more truly the essential danger to which all education is in its nature subject, the motto, namely, of 'Ideas *with* things and *before* words.' It is easy to bring an object into a class-room, and talk, and even make the children talk, about it. It is a much more difficult matter to make sure that they think; yet things and words are, alike, mere obstructives if the former do not stimulate, and the latter express, genuine intellectual activity in assimilating the new to the old.

In one sense, this discussion on the abuse of names is a digression; but it may serve to throw light on the general discussion to which we now return. More important to the educator than even the subject of the use of names is the subject of their origin. If mischief is done by their abuse, it is no less certain that stagnation is implied in their defect of origination. We have, then, to consider how names originate in minds left to themselves, in order that we may know how to guard the conditions of their origination in the minds with which we, intending intellectual benefit, venture to interfere.

‘A name is a word taken at pleasure to serve for a mark.’ In the act of attention to an object the subject passes from the non-voluntary, or passive, attitude to the voluntary, or active, attitude in which it keeps intellectual energy concentrated on the object. In this attitude, the current of mental life having set object-wards, we know that, at the same time, a distinct tendency towards movement is set up in the muscles of the body. This tendency results in external movements which, as we fitly say, *express* the mental condition. At the outset there is, evidently, a multitude of possible external movements, no one of which, more than another, has initially any organic connection with attention to one external object more than another. In other words, there is no universal psycho-physical law connecting causally the two acts, attention to object A and performance of movement B. If, however, it happens that for any accidental reason in the history of an individual the two acts do occur simultaneously, occurrence of the one

will tend, henceforth, to cause the occurrence of the other. If the simultaneous occurrence be repeated several times, this coherence of active tendency will become established, attention to the object will cause the movement, and the movement will cause attention to the part of consciousness corresponding to the object, and thus tend to cause the re-presentation of it and objects similar to it, by the disturbance produced in the region of its idea. The two acts are then said to be associated.

It is clear that the act of movement thus associated with the act of attention appropriate to a class of objects is able to serve the purpose of a mark in consciousness for that class : it not only causes revival, but it serves to mark position<sup>1</sup> without revival. The causes of the initial association are not in the universal nature of mind : we have called them, for that reason, accidental—they belong to the *history* of the individual. He may choose 'at pleasure,' as Hobbes says, the movement or set of movements out of several that are possible, i.e. that are suggested in some way at the time ; and if we understand by pleasure all motives that have voluntary efficiency he must so choose always. If we use the word in its more limited popular sense, we shall, however, be able to make a distinction between movements of expression chosen at pleasure—the accidental pleasure of the individual—and those chosen because they are found to be useful, in the sense of serving the

<sup>1</sup> The reader should be careful to note that here as elsewhere in similar connections, the word 'position' is used in a strictly metaphorical sense.

special purposes of the individual. The child who, at sight of an object, makes the movements of articulation resulting in the sound 'um,' chooses that word at pleasure in the limited sense; and when he tries to repeat a word suggested to him by his mother, he begins to do so by adoption of the most forcibly suggested movements, and improves upon his attempts under the influence of a desire to make the sound he hears. Later, however, he chooses his words under much more complex motives; he desires objects, and chooses the articulatory movements which he finds by experience to be effective in causing other people to give them to him. The name 'ball,' is found to be more effective than the name 'um,' which probably preceded it in his choice; he has, therefore, a manifest motive in adopting the former.

There can be no doubt that, since most children are brought up from infancy in some 'society,' the articulatory movements which they choose in the presence of objects, and associate with the objects henceforth, are almost all movements made in the attempt to imitate the sounds uttered by others in the same presence; and these are repeated afterwards in the child's hope to make himself understood. To the child born in society, the name, as uttered and as heard, is, from the first, a means of communication, and each name is selected mainly because it is the name used by other persons. The names are given to the individual, by his society which has inherited them, with all the suggestions of experience implied in them, from the past. They were made by society in the past,

and society slowly adds to them through history, the few adding to the language new words as they feel new needs of expression, and the many signifying their agreement by a tacit acceptance. But the individual accepts the language of his society as it is, acquires names by imitation of others, and uses them in the same sense as others so that he may be understood.

Nevertheless, it should not be forgotten that there is a primary motive to speech other than the motive of social communication. Speech of some kind, in its original character as a series of names, is essential to the development of intelligence; and for this purpose it might be the arbitrary choice of the individual rather than of the society. And, in all cases, the *initiative* of acceptance rests with him: if he does not need a word, he will not take the word offered by another person. Words are useless and unacceptable to the child who does not want a 'mark' for his idea, and does not care about being able to communicate it either. The first and most essential condition, then, of language-acquisition is the desire, or impulse, to express somehow the ideas that grow upon one. To this, even the desire for social converse is, I think, subsidiary; but clearly the two desires tend to react upon and strengthen each other. The love of 'discourse,' which the name-seeking mind attains to in its more developed state, is closely allied to the love of 'social intercourse,' inasmuch as both are satisfied by similar conditions. Still, it is not always the most social man who discourses best, and a good discourser may not be eminently social. Sometimes, indeed, we meet with persons intensely

social, as judged by the test of sympathy and desire for social interchange of ideas, who are yet comparatively dumb, who struggle and fail with speech. And, on the other hand, there are persons who like discoursing to themselves quite as well as talking to other persons.

The golden gift of speech comes to those whose intellectual needs demand it, and who are active in the supply of their needs generally. A muscular system with abundant spontaneity is favourable, because it implies general readiness to move and therefore to articulate; and the same remark applies to any special endowment of energy in the muscles of articulation. A will readily moved to action by the presence of the appropriate occasion is a condition favourable equally to attention and to speech; an unready will neither attends nor attempts to express. Now this is the point at which the educator gets his opportunity. He can devise means for the stimulation of the will to the double act of attention to the object and effort to acquire speech of its name; but he should not suggest the name till it is wanted. Thus he cultivates a habit of such complete attention as is implied in the felt want of a name for every object presented. A muscular system deficient in energy will however cause a certain indolence in the initial acquisition of the name, and a certain difficulty also in learning it for retention; while the vigorous system acquires promptly, and learns without effort because repetition occurs spontaneously. In the former case, improvement is to some extent dependent on exercise, and this goes with the discipline of will already mentioned.

Names should be supplied as they are required. If not, an opportunity of language-acquisition is lost, and—what is worse—the impulse to express ideas and define them in language is, for all but the very energetic, checked. But in language-acquisition, as in all acquisition, the emphasis should be laid on the active side. The given name is taken by being used to supply a felt want. If it is not used it is not taken, and in that case it might have been better if it had not been heard. There can be no doubt that a bad habit of hearing and not appropriating is often acquired, and care should be taken to prevent this. In general it may be said that children should be given ample opportunity of hearing intelligible talk, and still more should be encouraged to talk themselves.



## CHAPTER III.

PERMANENT BASIS OF EXPERIENCE ; CONCEPTS  
AND DISCOURSE.

IN perception, as we have seen, wholes newly presented are classed with re-presented wholes in respect of partial identifications made by the attentive subject between the two. A common name is given to all the percepts belonging to a class, and the name is recalled as the sign of the class in later perceptions. Taken by itself, this operation of classing suggests a superficial and false analogy with the process of packing things of different kinds in different pigeonholes, and fastening labels over each. And when acquisition is intentional rather than spontaneous, it is quite possible that this false analogy may become a true one. There are plenty of honeycombed minds extant, in the cells of which classes of latent images are packed away, at great waste of room and incapacity for further progress.

In a wholesome state of things it is, of course, evident that the pigeon-hole construction is a monstrosity, because the logical spaces assigned to different classes of presentations naturally overlap.  $(A + B)$  is identified with  $(A + C)$  in respect of the element  $A$ , and

with (B + D) in respect of the element B. The whole of experience to which all belong, therefore, is normally analogous rather to a fluid continuum with no intersecting solid boundaries, and capable, as the facts of association show, of transmitting disturbances in all directions. In this whole we may picture regions extending downwards from the surface, each of which corresponds to a class; and these intersect one another without limit. Each region is marked by a class name, the utterance of which is stimulated when attention is directed to it.

This metaphor, I think, fairly represents the degree of organisation to which the purely perceptive mind has attained. The students of the ordinary class logic will connect it with the idea of Euler's diagrams and others more modern. It can be said of two regions that one includes or excludes the other, either partially or wholly; and the regions in our experience correspond to the actual classes in the external universe. The purely perceptive mind is not however ready to take an interest in and make, though it may assent to, assertions about the inclusion and exclusion of classes. Such a mind must first become something more; and indeed it is not likely that most minds continue in so elementary a stage for long.

The condition which defines the act of perception we have seen to be the unity of consciousness at the moment of perception. The unification of presented and re-presented elements in one object by an attending subject is of the essence of perception. The result of many such acts is a mass of classified images, or rather

latent images, as above described. Having traced the genesis of this crudely organised mass, *we* are aware of the relations existing between its regions; but the person that has amassed it is not aware. It has built itself up *spontaneously* in his experience, though his attention has been an essential condition of the building. He has made a synthesis of images, based on the partial identity of their elements when analysed, but he has not analysed them, so far as he knows. *The analysis has been implicit, while the synthesis based on it has been explicit.* Under these circumstances a slight cause, such as the pressure of a difficulty in classification—i.e. in perception—is sufficient to induce such a concentration of attention on percept or image as will result in awareness of detailed content—the making explicit of the analysis hitherto implicit only. Sooner or later, the accumulation of overlapping classes becomes so oppressive, and classification in consequence so difficult, that progress towards analysis becomes inevitable from this cause only, if acquisition is to continue.

But this is by no means the sole, or the principal, motive producing *analytic attention*; it is in fact only a negative motive, and might equally well, as it often does, bring about arrest of accumulation, instead of the effort to make accumulation more possible by a more analytic consciousness of content. The educator, therefore, makes a practical mistake who aims at bringing about the analytic effort by merely heaping up occasions on which it would be useful. Such a method is as likely to smother as to stimulate, and does, I believe, frequently succeed in smothering, the

budding tendencies to initiate the work of genuine thought when those tendencies have not considerable innate strength. This, indeed, is one of the many ways in which education may be a fertile source of stupidity. It is the business of the wise teacher to recognise the signs of an overburdened intellect unable to digest the proffered food of thought.

The positive motive or source of progress at this, as at every other stage, lies in the law of the development of consciousness, as a progress towards the production of unity in experience—in the whole of consciousness, past, present, and to come. In the early stages, this law of unity is followed implicitly and without consciousness of it as purpose; it is not till well advanced on the road to unity that, ordinarily, the person following it becomes aware of it as a conscious desire and purpose.<sup>1</sup> But reflection on the whole course of logical development makes it apparent that the motive followed throughout by the thinker, first implicitly and later explicitly, is the impulse towards the unification of his experience. We have seen that perception is the unification of the subject's momentary experience in the object perceived. This implies memory in the simple sense; and memory, with it, implies the classification of experience, as a total that endures for the subject since its elements tend subjectively to reappear, and which is referred to a total external object since its elements frequently do objectively reappear. Thus experience and our general

<sup>1</sup> *Self-consciousness*, as distinguished from consciousness, consists, largely at least, in such *awareness* of intrinsic purposes and objects of desire which, so far as we are not aware of them, assert themselves as natural laws of development, but assert themselves more strongly when we are aware.

notion of the object of experience grow upon us under the activity of attention, classified as they grow. And, as they grow, the classes multiply and become confused.

Meanwhile, the tendency towards unity grows with the mind's growth, and can only find satisfaction in one way. The total of experience must, sooner or later, be reduced to a complete system capable of being grasped by the subject as one though manifold; but this demand does not yet appear. 'Sufficient unto the day is the evil thereof,' and the evil to a subject just surpassing the perceptive stage is the opaque condition of its experience-total due to the manifold intersections of its class-regions. The first step towards unity now is the clarification of this already fluid medium, so that the subject surveying any portion of it may see the connections between its parts. To see these connections is to understand, and to this the clarification already spoken of is the first step. Such a clarification is effected by analysis, the resolution of the syntheses made by perception into the elements which made them logically possible. These elements do not exist for sensory perception, or imagination, apart. To suppose that they do involves the same absurdity as the Cheshire cat's grin without the cat, so familiar to students of 'Alice in Wonderland.' The colour of a flower is one element, its form another, and its texture a third: but none of these can be perceived apart, either in that object or any other; each element must be perceived in some object, and with other elements. Yet the elements can be attended to *in thought*, and it is by this act of analytic attention that the contents of experience become transparent, visible to the gaze of the subject. Just as in

perception the energy of apprehension is concentrated on the presented whole as its focus, so in this case the same energy is concentrated on single elements, while their associates are apprehended more dimly with them, but only in so far as they force themselves upon the non-willing attention. The mind, in this case, is said to *abstract* the element of perception or imagination on which its attention is fixed, and which is destined to be the centre of its next activity. Indeed abstract attention consists essentially in this centering of activity on the elements abstracted, the activity not being that of sense-perception. The abstract element is, in fact, attended to as the starting-point whence a movement of *judgment* is made. It has a logical context of which it is the centre.

Thus the analysis which was implicit in perception and unconscious classification becomes explicit by attention to the abstract. Objects had been classed together because they possessed a common character: now the common character is consciously analysed. The question 'What' has gained a clearer, though not a fuller, significance. Its earlier use is in the question, 'What is this?' to which the perceptive but not analytic child replies 'A cat.' Its later use is in the question, 'What is a cat?' to which one sees at once that it takes a more developed child to reply, 'A furry animal with whiskers, a bushy tail, four legs, that says "miaw," and purrs when it is pleased.' And here it may be remarked in passing that such occasional questions, with the requirement of gradually more complete answers, are educationally useful towards the cultivation of the tendency to clear up ideas. This clearing up of ideas involves the expansion of all class-concepts, and indeed objects

generally, into a sum of parts: the elements which are identical in all objects of a class are definitely selected for attention as the characteristic elements of the class. This process of analysis and abstraction yields as result a discriminated class-character or qualification, the sum of qualities common to the class. Now, as these qualities, or elements of analysis, are abstract objects, not susceptible of separate sense-perception, signs to represent them in sense-perception are almost from the first indispensable. Qualification, therefore, depends on naming more essentially than classification does. Every movement of abstract attention requires as its complement, by which the abstract object is fixed and made reproducible, an act of naming. 'The object is white, smooth, warm, living.' This is an analysis each element of which is distinguished, and the distinction fixed for future use by the separate language-marks assigned to each. And the same remark applies more forcibly to the analysis of a class-concept expressed in such a description as 'Cats are warm furry things, with bushy tails and green eyes, that move about and purr.'

It will now be evident that so soon as the mind begins to analyse it begins to judge. The result of each analysis can only be expressed in a judgment, as the above examples show. Moreover, since the act of analysis implies the existence of a percept or concept to be analysed, it implies also the equivalence of the whole before analysis to the whole after. The object is the same, but the apprehension of it is different. First, it is apprehended as a *unity*; secondly, it is apprehended as an understood, or *analysed, total*—many though still one: and since this second apprehension

does not destroy the first, the unity is thereby judged to be the corresponding sum of parts. Hence it is to be expected that all attempts at expression of the result should issue in the assertion of a judgment that such a thing is so and so when analysed.

These early judgments are undertaken, as we see, in the interests of abstract analysis, and consist of abstract descriptions both of concrete objects and those class-concepts which become, for the first time, *abstract objects* by that description. Such judgments we may call *judgments of analysis or definition*, meaning by definition the most perfect description possible of the concept defined, neither deficient nor redundant. Their object is the clarification of the experience-content, rather than the investigation of the relations pervading it. The simplest analytic judgment is a singular one, as 'This is a dark blue round spot on the white table-cloth.' In such judgments there are ample means for good practice in analytic habits, but they fail in interest because they lead to interesting results only in exceptional cases. (The above for instance might lead to the decidedly interesting perception of an ink spot.) A singular judgment implies simply the attitude of mind in which the implicit analysis of the percept passes over into the explicit analysis of judgment, and thereby makes perception more certainly possible than before.

In the singular judgment the analysis is of the particular perceived 'this.' In the universal analytic judgment it is of the class-concept corresponding to many a particular 'this.' Most judgments attempt very partial statements. For instance, in the judgment 'All cats have whiskers,' one single element of



class-character only is stated. In 'Tigers are big cats, very fierce, and striped black and brown,' we have a fairly satisfactory example of judgments more familiar to the schoolroom than to the text-books on logic. It is by no means a pure example of analysis, however, since it assumes bodily the class-character of cat; but indeed though analytic judgment is an important intellectual function, few purely analytic judgments are actually made. Nevertheless, it is important for us to consider the pure analytic function of judgment by itself, as having an object and a result of its own.

That result is a new insight into the ordering of experience as along lines of abstract qualification—the vision of an experience which has become transparent, and which may be pictured as bounded below by the logical continuum of abstract qualities, each concept being presumably definable by the sum of properties which it covers on this surface. Wherever the activity of attention to the abstract has completed its work, the vision of this inner surface is clear; in other places it is not clear, thought is carried on uncertainly by means of concrete and often indistinct images, because the clear forms of the abstract understanding are as yet indiscernible. The remedy lies in more analysis, more persistent attention to the common qualities of class-members, more discernment of class-character, which discernment is the true conceiving of the class-concept. The concept is, in fact, perceived, or rather conceived, as a sum of properties, each one of which, to continue the metaphor, has a definite position on this under surface of experience—the qualification-continuum. The percept, on

the contrary, is perceived as a whole which suggests other and remembered wholes, and which would be judged on analysis to have certain properties common to all in the series, besides others peculiar to itself. It emerges for the subject on the upper surface of experience, and is presented as a concrete whole in all the detail of sense-presentation. Just so the image emerges equally concrete but re-presented. The analysis of either, as a discrimination of its properties, implies its reference to the region of experience overlying a particular portion of what we have called the under surface or qualification-continuum. Such analysis is seldom or never made completely; it is generally carried only to the length required for the definition of the class to which the percept is, by name, referred. We might, indeed, go on to analyse any individual 'this' to the utmost possible limits, but something more than a logical interest would be needed as motive. Our ordinary procedure, as already explained, is to give 'this' a name, thus referring it to a class, and recognising it as centered in the region of consciousness which overlies the position of that class-concept in the qualification-continuum. The act of explicit analysis which we may find it necessary, or desire, to undertake, may be pictured in our metaphor as the tracing downwards of the lines of connection which run from the upper, or concrete, to the lower, or abstract, surface. This process, it is almost needless to point out, results in the fact of generalisation; a percept thus centered on its corresponding concept is generalised, and the movement of attention towards the concept implies a disturbance of the related images which lie, in the language of our

metaphor, along the connecting path. This disturbance may, and often will, cause a rise to consciousness of some of the disturbed images; we know that this rise is a natural, though not an essential, part of the event of generalisation. And this leads to remark on the opposite event of particularisation, which is in many respects as important as its counterpart. Just as the percept may lead attention conceptwards if it be surveyed analytically, so the concept may lead it perceptwards with the result of illustration concretely in imagination. A concept with what we might call a lively upward tendency, (and all concepts have some), sets up disturbances in the region of experience overlying it,—upward currents which carry images illustrative of the concept to the surface of consciousness. In an excited state of mind there is an increase in this tendency: to the imagination of the orator roused into enthusiasm, for instance, they rise rapidly. It is more instructive, however, to observe the ways of the stolid lecturer, who carefully prepares his illustrations beforehand in his study. His way is to survey his concept carefully, to dwell on its analysed details, till it stirs his imagination at last, as it surely will if he be not very dull as well as stolid. The stolid mind need not be dull, but it moves slowly and carefully: its illustrations, and, we may add, its jokes, are excellent and bear inspection, but they are always thought out and lack the lightning flash of spontaneity. In a mind of lively imagination, as the opposite may be called, the currents start upwards at once and flow rapidly; illustration, metaphor, jest, flash out with a spontaneity that in

the expressive speaker is transparently evident. This quality of mind, though often a snare because it may be used as a cloak for inferior workmanship, is undoubtedly a valuable gift. It is, therefore, of much educational importance to decide whether it can be acquired in any measure by pursuance of the stolid man's careful method of attaining similar results. Since the difference is only a difference of pace, and to some extent also of habitual direction in the currents of intellectual activity, it would seem that the affirmative answer does not admit of a doubt. Pace can be improved by exercise even in the lifetime of the individual, and probably the most rapidly thinking races are the races that have thought most, though not necessarily best.<sup>1</sup> Habitual direction of intellectual currents is still more notably susceptible of change by the continual exercise of voluntary attention; but here it is well to notice that improvement of any particular kind obtained by such change may be obtained by a more than equivalent loss in some other ability. Later on, we shall be in a better position to gauge the possible loss in the case before us. We may leave the subject now with the general remark that generalisation is, on the whole, a more valuable power than particularisation, but that facility in the latter is—and perhaps for that very reason—a rarer gift. It has, however, been seen that effective generalisation implies a considerable backward wave of disturbance among the corresponding latent images, and this is normally conducive to par-

<sup>1</sup> Rapidity of imagination is a particular manifestation of rapidity in the activity of intellect—rapidity of *thought* in the wide sense of the word.

ticularisation, either then or afterwards. Hence it may be inferred that the standard mind which is our special study excels in both abilities.

To the field of abstract, or logical, attention are referred all the properties discerned in concrete objects, under the abstract names which serve as their signs in concrete consciousness, while it is the sum of the abstract properties in every case that gives meaning—i.e. its *connotation*—to the concrete class-name. This abstract field is not in experience; it is not a possible object of sensory consciousness: but it contains an account made by the thinker of all the possibilities of such consciousness; it is at once the symbol of all past experience, and the basis on which can be constructed all anticipations of a possible and probable future. The vision of it enables us to anticipate future relations between objects which shall be completely consistent with past experience. It may very well be called the *field of logical discourse*, as the field to which are referred all judgments made respecting universal relations between general ideas, these being true in all particular cases of the sort named.

Logical discourse deals with such general assertions of truth—assertions therefore which are true, not only at the moment, but permanently. They may indeed be mistaken assertions, made with false, or unclear, vision of the field; but they are always meant to cover permanent truth, and this their form implies. Moreover discourse begins normally in society; A, B, and C aim at least at using the same words for the same ideas; the word is meant to be a common mark by which each shall know that his idea coincides with the ideas of others.

A's logical discourse, therefore, is equally discourse for B and C: it deals not only with that which is permanently true for him, but also with that which is true for them. The truths of relation asserted of concepts in logical discourse are universal for him throughout time, and universal also as true for all thinkers. My field of discourse is not mine alone; it is the universal field—*the universe*—common to us all, though we may be at various stages in our endeavour to clear up completely our vision of it. Thus escape is made at once from the confusion and want of unity of mere perceptiveness, and from the limitations of mere singular experience, into apprehension of that logical pattern of systematic and universal experience which suits all times, all places, and all persons. At this point, the thinker represents no longer his mere self but the universal searcher for truth: he deals no more with real elements presented to him personally, but with ideal elements representative of the real for all.

And in attaining to this, he becomes also a being who can communicate his thought to others and be made aware of theirs. Mutual comparison of experience becomes possible; and this is welcome, for it is felt to satisfy the thinker's need for a test of adequacy in his ideas. Divergence of thought is recognised as a sign of inadequacy somewhere in the clearing up of conceptions; and as the world grows wiser, each person grows happily more apt to think that the inadequacy may be in himself. The lover of truth is impelled by his desire for intellectual testing to seek the society of other truth-seekers: and the genial man is impelled by his love of social discourse to find the universal which all can understand.

## CHAPTER IV.

## UNIVERSE OF JUDGMENT: QUALITY, NUMBER, MEASURE.

A TURNING-POINT in logical development is reached when interest in the abstract field of vision is securely established. There is probably no period in the life-history of the individual when the process of penetration to it is not going on; it clears up bit by bit, more or less slowly according to circumstances, till at last the time comes to some, though not to all, when the mind busies itself habitually about the universal rather than the particular, and looks habitually through the particular to find the universal which it implies.

We have seen that the mind attains to this habitual attitude by incessant analysis of the class-conjunctions already made, with consequent discovery of the universal elements coincidence of which makes them logically possible. Every perception implies a class-conjunction, and this an analysis resulting in a concept. Analysis is thus an inevitable part of the total mental event, the coming of the mind to consciousness of its content as a unity, that first becomes manifold under the disturbances with which it is visited from without, and secondly is reduced to unity again—the unity of a connected system, one though manifold—under the law of logical life, by which the experience of *one* subject tends to become one

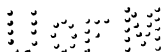
as well as manifold. Every such analysis again implies an analytic judgment, affirming the *equivalence* of some concrete experience to its analysis, by which the concrete experience is relegated to an abstract idea as its basis. Thus when we assert that 'Birds are feathered bipeds,' the birds are concrete experiences, the feathered biped is an abstract conception. Judgments of this kind are part of the general operation by which the mind relegates the whole of its concrete experience to an abstract basis, the result of which might be expressed in a comprehensive judgment that the universe of experience is a sum of classes, each class being characterised by various combinations of properties, all of which may, in the abstract, be referred to particular positions in the abstract universe. The statement of each such judgment consists of two terms, the subject and the predicate, connected by the word 'is' or 'are,' or some other expressing their equivalence. The subject has reference to the concrete, the predicate to the abstract. What then exactly does the assertion of equivalence in the judgment of analysis mean? The true meaning appears to be that the results to apprehension are the same, though the operations of the mind differ. Birds in the abstract are feathered and biped; feathered and biped in the concrete, (or, as we generally say, things), are birds. In other words more closely corresponding to the form of statement, the presentation or apprehension *perceived* as bird is *conceived* as feathered and biped.

So much for judgments of analysis, implied as they are in the simplest perception, and brought into conscious operation by the mind's development towards



consciousness of content, under the law of unity. Manifestly, the next step in that development should be the discovery of relations between the various portions of the abstract, or conceptual, field to which experience is referred. Such relations are asserted to some extent, even explicitly, in certain judgments of analysis; but for the most part they are so far *implied* only. As, however, the field of conception clears, the demand for a clearer vision of conceptual relations grows more emphatic, at the same time that it becomes easier to satisfy. Pursuing our metaphor, which still holds good, we may say that the subject comes in sight of concepts partially superposed, and states this fact by the assertion of judgments such as 'A is part of B,' 'C is not part of D,' and so on. Moreover, having come in sight of such material for judgment and judged, just as having come in sight of material for perception he perceived, it is in the line of the mind's development that he should search for more truth of this kind already experienced. Just as he puts forth voluntary energy to perceive more having perceived, so he puts it forth now to judge more—to see more coincidences with awareness of their duality—having judged. In both cases, the *act* of the subject is an act of *apprehension*, and in both cases the *fact* apprehended is double—judgment is involved; but in the second case only, are both terms of the duality explicit in consciousness, and to it, therefore, is the term judgment fitly limited.

The second class of judgments—the more important class, and the class in the definition of which all others can be included—is that containing judgments of relation. These assert facts of coincidence or non-coinci-



dence, apprehended as existing between concepts. Now, as already observed, the concept is to conception the sum of properties judged to make up the common character of all members of a class. The coincidence of concepts is, then, the superposition of groups of properties in the qualification-continuum or field of concepts. The name 'whale,' for example, *denotes* any one of a certain class of objects, and *connotes* the sum of properties common to all of them. Such sum of properties is called its connotation or intension, while the sum of whales is called its denotation or extension. The concept is defined by the intension of its name: that intension is the group in the qualification-continuum with which we have to do in judgment. Consider the example 'Whales are warm-blooded animals.' Here we assert that everything which may be called a whale may also be called a warm-blooded animal; and so we may apply the judgment to our expectations of the concrete world, expecting to perceive warmth of blood when we perceive a whale. But as a judgment, rather than a convenient formula for expectation, it means that the sum of properties connoted by the name 'warm-blooded animal' is apprehended as superposed on the sum connoted by the name 'whale.' It does not state whether the latter sum is *all* superposed on the former; in this respect it is an incomplete statement and might cover an incomplete apprehension of the two concepts. It is just as complete, however, as is necessary for its practical purpose, that of a direction given by the mind to itself, to expect that the perception of a whale will coincide with the perception of a warm-blooded animal, as part,



at least, of its whole. The analysing instinct requires more than this, no less indeed than a perfectly distinct apprehension of all the coincidences on which experience depends; and the effort of natural science is directed to such a questioning of experience as will on analysis yield a complete account of those coincidences. The judgments which form part of that complete account have terms that are exactly identified one with the other: they assert that one concept qualified in a particular way is the other concept, though each of the two identified has been arrived at by a different mental operation. Planets are stars shining by reflected light. Here the concept 'star,' whatever it may exactly include, with the quality non-self-luminous added, is asserted to be the concept planet. This is a judgment in the scientific sense, whereas the former judgment 'Whales are warm-blooded animals,' has all the indefiniteness which characterises the loose popular, or quasi-scientific, apprehension of truth.

The growth of the scientific impulse shows itself in the logical tendency to throw all judgments into strict *scientific form*, marking the dark places where apprehension still fails with some symbol of ignorance. A judgment in such form expresses completely the ideal of knowledge as an object of attainment, and indicates the dark place by the illumination of which the object may be attained. It defines the end, and also indicates the means by pointing to the spot to which inquiry must be directed. Let us recur to our example of a popular judgment, and consider how we may throw it into scientific form. The concept whale covers inclusively the concept warm-blooded animal, but as to the

remainder of the first concept nothing is asserted. Scientific inquiry is to be directed to this remainder, about which nothing is supposed to be known since it is not assigned to any portion of the qualification field. Scientific form is satisfied in the statement, 'Whales are warm-blooded animals of a particular kind;' or, in terms of intension, 'Whale qualities are those of warm-blooded animal life, and others not defined.' The last clause contains the direction that completion of the judgment is to be found in (1) observation of whales, and (2) analysis of the results. Thus the quest of natural science appears as the completion of incomplete judgments. And since the learner's work is done by the learner's inquiry, and the teacher's work therefore turns on the stimulus and direction he gives to this inquiry, study of the quest naturally implied in each branch of knowledge is what primarily concerns him. He has to see that the incompleteness of incomplete judgments is felt, and to suggest so far as is necessary, and no farther, the means of supplying the felt want.

To the question of the perfect logical form of judgment and its convenient expression, we shall return presently. Meanwhile, our inquiry has revealed to us, in conscious activity, an important ability of the developing mind. Judgment is first analysis, then the apprehension of coincidences between analysed wholes; or rather judgment indicates both these activities, laying the emphasis now on one, now on the other. But in the apprehension of coincidences, lacunæ—qualitative spaces unfilled because undiscriminated—make themselves felt; and a new effort of search and analysis is

devoted to the filling of them. This filling is itself an act of synthesis, the newly discovered attributes are added to the old, and the sum taken as the fully conceived whole. It may, indeed, be said that whenever a whole is analysed, the conception of it afterwards as an analysed whole is a corresponding act of synthesis; but there is a difference between such a synthesis which is simply a retention of the original wholeness, and the synthesis which concerns us now, when to the concept of a 'warm-blooded animal,' for instance, is added the attributes peculiar to the whale.

Attributes are, then, deliberately added together to make a concept, the elements of which are derived from experience in perception but added in conception; and this is part of the business of thought. It is a great part also of thought's play, as we see in the conceptions of centaurs, mermaids, flying horses, and the manifold gods and fairies of the world's infancy. In each of these we have a fanciful or arbitrary conjunction of concepts, natural only as expressive of circumstance and race-character for those who made them; while in the modern poet's play of fancy we have conjunctions sometimes so far fetched as to be expressive only of his desire for originality and his synthetic vigour. This activity of the mind in putting together its concepts may be called, when they are also projected outwards as imaginary objects, *synthetic imagination* or imagination simply, being indeed the making of images, not, as in simple memory, their revival only. Much of the past is reproduced, not by simple revival but by remembrance proper, the re-remembering or putting together of past

experience. This may be called reproductive imagination, and, if logically based as in the cases we have to consider, it starts under some motive from a synthesis of concepts: we recall an event to a child's memory by describing it in abstract language, thus suggesting the concepts required. More interesting is the case of productive imagination, in which *new* synthesis of images is similarly made, under the stimulus of special motives, or in the pure spontaneity of the mind's life. And here again the start may be made from a synthesis of concepts suggested to one mind by the words of another person; as when a teacher describes to a class the characteristics of a tropical jungle, the imaginative members of the class, at least, picture to themselves an imaginary jungle. When the synthesis is not suggested by the words of another it is in the full sense original, and we must look for its producing motives in the spontaneity and disposition of the mind producing it. Each original worker constructs images consonant with his disposition at the time, images suggestive, for example, of sorrow, or of joy, in all possible varieties of each.

Much might be said here about the functions of imagination as directed on various objects, of which probably the object of sympathetic imagination—i.e. the construction of an image corresponding to another person's state of mind—is the most important and most interesting; but our concern at present is with the general march of logical development. We must, therefore, return to the fact of logical synthesis<sup>1</sup>—the addition

<sup>1</sup> Such synthesis may take place with very little disturbance among the images in which the concepts synthesised *might be* pictured forth.

of concepts with a view to the complete apprehension, in all possible judgments, of both terms as transparently superposed, each on the other.

So far as we have hitherto considered it, this is a synthesis of elements differing in quality, such, for example, as a synthesis of various colours and various sounds. But synthesis may also, and must indeed, be made of elements discriminated although they do not differ in quality. Homogeneous elements, thus discriminated and subject to synthesis, are called *units*. The difference between *the one* and *the many*, as primarily apprehended, is a difference of kind. The analysis of the many, however, leads to the conception of many ones or homogeneous units, just as the analysis of an ordinary percept yields an ordinary qualitative concept. Further discrimination shows a difference between one many and another many, still as a distinction of kind. Judgments of more or less now become possible, and judgments of equality of the simplest character—as simple as the judgment by which we assert that the light of one candle is equal to, greater than, or less than that of another. And, just as the qualitative judgment that all A's are B's is felt to be unsatisfactory because it does not account for the remainder in concept A, so the judgment that C is more than D is unsatisfactory because it does not account for the remainder in C. Thus there arises the necessity for an account of the remainder, and that account in the case of plurality, as not in the other case, can be always given by the addition of units to D till the sum is intuited as identical with C. The units added

are chosen as common parts of C and D, these being considered in the given case as differing *in manyness* simply. For example, a plurality may consist of dissimilar objects, but the mind, considering its mere plurality only, eliminates the qualitative variety and distinguishes the members of the plurality as mere units, it may be similar, it may be different. The plural objects C and D, so considered, are treated as *objects that can be numbered*. D with this object and this and this etc. is the same *multiple of objects* as C. Whether the objects in C differ or not from the objects in D, all the objects considered are equally objects, and as such the mind may treat them alike; to do so is to treat them as units, and groups of them as numbers. Attention is here directed to the bare *abstract objectivity* of objects, in which bareness of all particularity their individuality still remains. This abstract individuality is the quality connoted by the term unit, while its denotation is the universe of individuals, about which discourse is taking place. And, since the mind in its analytic capacity may divide any of its objects into a sum of parts, and may in its synthetic capacity regard any group of individuals as a single whole, it is clear that this universe may be considered as constituted, under different motives, in a great variety of ways, with a corresponding variety in the number of individuals composing it. In counting things, a group of small things like a doll's house might be called one thing, and one pair of candlesticks might be called two things; or this view of distinction between things and parts of things might be reversed. In short the mind always chooses its own unit; it groups its



objects as it pleases, and chooses as units the groups it has made: sometimes it counts by faggots, sometimes by single sticks. And the objects counted may be qualitatively similar as in this example, or they may have nothing in common except their objectivity—their existence for us as things to be perceived.

There can be no doubt that the impulse to number comes more easily into play when qualitative differences do not present themselves to the observer. The numbering impulse would have to be stronger in a child who took to counting the articles of furniture in a room than in one who counted the number of books on a shelf, and still more than in one who counted the cubical bricks in his box. The reason is manifest: qualitative differences attract attention, and their reduction, therefore, gives room for the play of numerical discriminativeness, and the normally related attempt to reduce number discriminations to order by regular numerical synthesis of parts. It is, however, important to note that the pure idea of number belongs to the most abstract idea of objects, though it is equally implied in, and equally makes possible, all number operation with similar or dissimilar objects. *The unit, in fact, connotes only the mind's own act of discrimination.* The abstract unit might be defined as the object of discrimination in ultimate abstraction.

Since this is the abstract unit, the mind has an unlimited capacity of producing such units, and therefore, as synthetic, of making synthesis of number without limit. It can count without *things* to count, and can build up a continuum of number without experience, relative to

which continuum judgments in perfect scientific form can be made independently of any appeal to the evidence of the senses. Not that such appeal may not be educationally useful in its way. It is no easy matter for a mind below a certain level of excellence to keep clearly distinct in apprehension units which are nothing but its separate acts. The natural aid in such case is to set some object—a stone, a finger, a pencil dot—to stand for the first unit, a second similar object to stand for the second, and so on. Nevertheless, the unit of arithmetical computation thus aided is not the concrete object, but the act of discrimination which is exercised on it; and the computation itself is the synthesis of such units. Being discriminated thus purely, as acts of discrimination resulting in pure *discriminates*, these units are suitable for reference to any class of objects whatsoever, and, each synthesis of them is interpretable as a synthesis of any objects. Judgments, also, which are made concerning syntheses of pure discriminates may be transformed immediately into judgments concerning objects as abstractly discriminated.

Let us now consider these syntheses and the judgments about them. Every act of synthesis results in a *number*, apprehended as a single object of apprehension, and to which is given a name of its own. The first number is the unit, and each succeeding number is made by the addition of the unit to the preceding number. Thus, one unit together with one unit makes two units; and one with one with one, or two with one, makes three units; and so on. And this is expressed in mathematical, or symbolic, language as  $1 + 1 = 2$ ,  $1 + 1 + 1 = 2 + 1 = 3$ ,

and so on, the sign + standing for the operation of synthesis on the elements of the concepts, and the sign = for the operation of judgment that two wholes, though differently conceived, are similarly apprehended. In this case the one whole,  $1 + 1$ , is conceived as a *synthesis*, the other, 2, as a *unity*.

Each numerical synthesis takes, then, the form of a judgment, just as we have seen that each qualitative analysis does. But the difference is important; whereas in qualitative analysis the mind takes the unity as subject and finds the corresponding analysed predicate, in numerical synthesis the unity is predicate and the synthesis is subject. The reason is obvious; analysis is a search for the parts of a whole, synthesis the search for a sum of parts. Moreover, we may here note the significant contrast between qualitative judgment, as normally taking its rise in the concrete sensory experience and therefore primarily analytic, and numerical judgment, as rising in acts of pure discriminativeness and consisting primarily in synthesis of such acts.

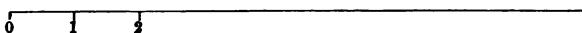
Hence springs the fundamental difference between natural and mathematical science.<sup>1</sup> In natural science the search is for more experience and more analysis to complete the clearing up of qualitative concepts in the qualification-continuum, and so for ability to complete the work of qualitative judgment. Mathematical science, on the other hand, undertakes a vast constructive effort, with simple elements of its own making—pure discriminates,—to render such a complete account of all

<sup>1</sup> The name of 'physical science' applies to the sciences which partake of both characters.

possibilities in numerical experience as is at once absolutely true of all experience and absolutely independent of any. So the natural science student looks outwards and interprets the concrete in terms of the abstract. The mathematician looks within, to the pure discriminates which he can produce at will; and, by the workings of pure synthetic—i.e. mathematical—imagination and pure intuition, he ascertains truth in the abstract, which he or another may interpret in the concrete.

It is not our purpose to follow the mathematician far in his undertaking. It will be enough for us at present to understand how he constructs the number-continuum which he applies to experience, and the general character of numerical judgments when they become something different from numerical syntheses. In other words, we will refrain from close consideration of mathematical generalisation, which involves after all only higher stages of the same processes, and consider the lower stage of arithmetic simply.

The universal metaphor for the continuum of number is that of a straight line divided into equal units, thus :—



The starting point is zero, the second point marks the place of one unit, the next of two, and so on, there being clearly no limit to the conceivable length of the line or to the number-continuum which it represents. This is expressed in the statement that there is no limit to the conceivable synthesis of number. The number-continuum is more abstract than the divided line, since the units in it are not particularised; it has no definite

scale. Nevertheless the metaphor is useful as an aid to clearness of ideas, and we may picture it further, in combination with the metaphor for general experience, as a line at right angles to the continuum of quality, making a third dimension with its two dimensions. Below the surface this line represents the pure number-continuum not applied to experience. The application to experience may be pictured as made by a revolution which, keeping the starting-point still on the qualification-surface, brings the number-line into a corresponding position above. In that position it denotes number corresponding to any concept to which it is applied, while in its original position it denotes number in the abstract unapplied. Thus concrete number, as ten dogs, appears in the metaphor as a superposition of experience ten units thick on the concept dog.

Few facts are more familiar than the discrimination of objects, otherwise similar, as respectively more and less—greater and smaller—when they are not equal. In this case, as in that of plurality, the natural demand is for completion of the less till it equals the more; but the demand is more difficult to make and to satisfy for *magnitudes* than in the case of plurality. What is the 'much' that together with the 'less' equals the 'more'? The answer is found by applying the idea of number which we find in the 'many' to the measure of the 'much.' Analysis of the magnitudes observed yields an appropriate *unit* common to both, and the number of units contained in each is its *measure*. The subject of choice of units has already been noticed; and the synthesis of like units to make totals considered as unity is

the primary operation of number. The characteristic fact in *measuring* is, however, the mind's deliberate reduction of an apprehended unity to a multiplicity, in order that the relation of its 'muchness' to another unity similarly treated may be defined. It is so easy to talk about two yards of ribbon or ten pounds of tea, that we may readily enough underrate the difficulty with which a mind is brought initially to take an interest in the discovery, and even the fact, of measure. But to how many people does it occur to measure the number of feet in their rooms or their furniture, or to inquire into the quantity of rain that fell last night, or the intensity of the light of the planet Jupiter?

In the last example, the quantity considered is a quantity of *intensity*, not of *extensity*. The difference in intensity of light between Mars and Jupiter is a difference in the 'muchness,' not of a thing, but of a quality, even though science should be able to explain it as dependent on a difference in the quantity of certain things. The redness of a rose may be greater than, equal to, or less than that of another rose, just as its size may be; and so with all qualities—they admit of various degrees. The impulse to measure degree is clearly as natural and inevitable as that to measure magnitude, but it is incomparably more difficult to do so, for the simple reason that units of quantity can be directly chosen and applied, and units of quality cannot. We can settle on a unit of length and find by experience the number contained in a certain stick; but how shall we settle on a unit of redness, and ascertain the number contained in the rose? The problem can only be

solved indirectly, when at all, by choice of an object yielding a sensation-unit of the quality, and ascertaining the number of these necessary to produce the *same sensational effect* as the object yielding the degree of quality to be measured. For example, the mind can judge of equality between the blackness of two shadows cast by different lights. Hence the intensity of a given light can be equated to that of six units, and the intensity measured as six. In another case of less difficulty, the temperature of a given fluid can be measured by the effect of expansion produced by it on a portion of mercury, as equal to that produced by a certain temperature decided with reference to the practical limits of temperature at which water freezes and boils respectively.

Enough has been said to indicate the character of the work undertaken by mathematico-physical science in its primary operation of measuring magnitude and degree. With this primary operation—the rise of interest in it, the means contrived for inquiry, and its manifold detail—the teacher of elementary physics is in the first instance concerned. It is his business to train the learner to seek measure in all things, and to appreciate and grapple with the difficulties to be overcome. Let us now return to the subject of judgment in number, our conclusions concerning which will apply to all things numerable and measurable, and to all the algebraic generalisations of number equally.

As we have seen, the primary judgments of number are purely synthetic, and arise from actual construction of the number-continuum. Other judgments, arising from the perception of possible syntheses or analyses in

that continuum are synthetic if the synthesis falls in the predicate, and analytic in the contrasted case. Thus  $2 + 3 = 5$  is a synthetic judgment; the quantity of two units added to the quantity of three units superposes exactly on the quantity apprehended as five units. The synthesis implied in each number is before the mind when it judges, and thus the identity is transparently evident as an identity of two syntheses differently made. Again,  $5 = 2 + 3$  is in form analytic; and though it is the same proposition for truth as the other, it presents itself quite differently to the mind making it. It is an answer to the question, "What are the numbers which added make up 5?" There are, however, other answers, as  $5 = 1 + 4$ ,  $5 = 1 + 1 + 3$ ,  $5 = 1 + 1 + 1 + 2$ ,  $5 = 1 + 1 + 1 + 1 + 1$ , from the last of which all the others can be immediately inferred. The analytic question is essentially one that admits of various answers, and each amounts to making transparent, or re-making, the original synthesis more or less completely. The synthetic question, however, has always a determinate answer, and that answer can be determined directly, without memory or experiment, by a fresh act of synthesis. Thus from the 2 we attain to the 5 by counting on three units. Arithmetical judgment is in its nature synthetic, and only becomes analytic by inversion of the mental operation. And this inverse operation being indeterminate in result, it is possible to choose one of the parts and inquire determinately as to the other: e.g. if 2 is one part of 5, what is the other part? This is the question of ordinary *subtraction*, while the synthetic question is that of addition.

But, as already noticed, the mind chooses its own



unit according to the purposes it has in view. Any one of the wholes which it has synthesised it may therefore take as a new unit, without losing sight of the synthesis in it. Now the synthesis of *similar* numerical wholes develops naturally into their deliberate treatment as new units, which can be synthesised just as the original ones were; this treatment is indeed implied in the addition of equals, and advance is here as usual, the explication of this implicit change of units. For example,  $2 + 2 + 2 + 2$  represents a synthesis of four twos, just as  $1 + 1 + 1 + 1$  represents a synthesis of four units. The first synthesis is four twos, just as the second is four units; and we call the operation performed on two its *multiplication* by four. Hence the definition of multiplication as *that operation of number on number by which the first number is subjected to the same process as is performed on the unit to produce the other*.<sup>1</sup> The performance of the operation is briefly indicated by the symbol  $\times$ ; and the expression  $2 \times 4$  instead of  $2 + 2 + 2 + 2$  exemplifies the mind's ability to condense the ideas it constructs into briefer forms, pregnant with a fuller meaning both for thought and for sense.

Judgment emerges once more as assertion of the results attained by this higher synthesis of number-ideas which the sign  $\times$  represents. Thus  $2 \times 4 = 8$  asserts that synthesis by multiplication of 2 by 4 is intuited as identical with the simple synthesis 8: the two different operations yield the same result. And just as

<sup>1</sup> This definition is used in several of the newest text-books, as, for instance, the Rev. J. B. Lock's *Arithmetic* and Mr. Charles Smith's *Algebra*.

addition has an inverse operation of analysis on which subtraction is based, so has multiplication an inverse operation which may be called factorisation, and on which *division* is based. Thus  $8 = 2 \times 4$ ; and the question may be asked, 'What is the factor that multiplied by 4 yields 8?'

In these four operations of addition, subtraction, multiplication, and division we see in outline the whole of arithmetical judgment. The two first are the synthesis and analysis of those groups of pure discriminates which the mind makes for itself, and may make out of self-originated material—its own acts of attention. The two second deal with a synthesis, not of results, but of operations: the result of the first operation is taken as unit by the second, and the assertion made is that the final result is identical with that of another specified operation.

In arithmetic, the mind deals with abstract objectivity, the reference to objectivity being suppressed, because the object-matter is of no account. In algebra we deal with the generalisation of all results in number—the abstract of pure objectivity; and we extend the field further to include the idea of negative number. The judgments of algebra are statements of the laws under which any numbers, positive or negative, variously combined, are equivalent to the same numbers otherwise combined. The object of attention is more abstract than before, more difficult therefore to contemplate with clear awareness of its character, and more difficult also as an object of interest to the ordinary mind. The significance of judgment, however, is identical for the earlier

and the later science, although they busy themselves with assertions of a somewhat different kind—in arithmetic with particular facts, in algebra with general laws from which numberless particular facts may be inferred.

Comparing now ordinary quantitative with ordinary qualitative judgments, we are struck by the fact that in the former exact equivalence is asserted of the subject to the predicate. This form of exact equivalence we have already determined to be the perfect scientific form of the qualitative judgments previously considered ; and we found that all these can be exhibited in that form, by indicating that an unknown somewhat, together with one term of the judgment as stated in the popular loose way, is apprehended as equivalent to the other. In quantitative judgments of the normal type, however, the somewhat is always stated as known ; 3 is the number that added to 2 makes up 5 ; the matter is adequate to the perfect scientific form. It should, indeed, be noticed that the loose popular form is used arithmetically, though very little in the science of arithmetic. We do say that 5 is greater than 3 and 2 less, or symbolically,  $5 > 3$ , and  $2 < 3$  ; but the mind passes on at once to answer the suggested question of 'How much,' and adds the required complement to the lesser number. This, indeed, is the question in subtraction, as for example  $5 > 3$  by how much ? Such questions can be answered by immediate synthesis ; no prolonged pause is necessary, as when in the case of quality new observation and analysis is undertaken to illuminate the dark place. Cases, however, occur abundantly in numerical inquiry, and are classed with doubtful accuracy as a part of algebra, in

which the illumination of dark places requires a prolonged investigation performed on the equated terms. In such cases it is convenient, or even necessary, to fill up the dark place, meanwhile, by a symbol of ignorance; hence the familiar use of a symbol denoting unknown quantity. For old association's sake let us call it  $x$ . Then the loose judgment  $5 > 3$  can be written in strict form as  $5 = 3 + x$ . Thus the question of subtraction can be put from the outset, and well put, as  $3 + \text{what?} = 5$ ; and the operation itself may be performed by immediate synthesis, filling the blank in the form  $3 + \dots = 5$ . The question here is quite on a par, though the process of answering it is not, with the question of a simple equation, as when, starting with the fact,  $x + 6 = 10 - x$ , we inquire, 'What is  $x$ ?'

Now since the sign  $+$  represents in mathematics the operation of synthesis applied to mathematical matter, and the symbol  $x$  represents ignorance of mathematical matter and suggests inquiry, it is plainly both natural and convenient, and therefore logically right, that these symbols should be used for the same operation and ignorance when applied to qualitative matter. Thus, recurring to our old example, we may state the judgment briefly thus:—Whale qualities = animal qualities + warm-bloodedness +  $x$ -qualities. This is analytic in form, and suggests inquiry concerning  $x$ , and the inquiry is directed to the greater concept 'whale' for the discovery of its remainder. In the corresponding arithmetical judgment, as  $3 + x = 5$ , inquiry is directed, on the other hand, to the lesser concept 3, for the discovery of the complement which

with it makes up the greater concept 5. This contrast, it is scarcely necessary to say, is involved in the general contrast between the methods by which the mind finds the continuum of quality analytically, and constructs the continuum of quantity synthetically.

It must never be forgotten that, though the operation of judgment is performed by each thinker on the abstract contents of his own mind, when it is performed perfectly, or aims at perfection, it is always normally directed to knowledge and foreknowledge of universal experience. We judge as to the possibilities of perception for ourselves and all others: our discourse is of concepts, but refers to an external universe of perception, common to all and independent of each. 2 things + 3 things = 5 things always: this we assert as an anticipation of all experience, *necessary* since it is founded on the mind's own act of objectification solely. So also we transform the conceptual judgment about whales into an anticipation of class connections in the external universe. Whales form one class, warm-blooded animals another; in our attempted analysis of the perceived universe we may select the whole whale-class from the universe, and also the whole class of warm-blooded animals, and we make the assertion that in perception the former class will be found to be included in the latter.

This, however, is not yet an identity such as knowledge requires; to state our perceived fact in the form of an identity, and in terms of the external universe, we must further suppose that *a selection can be made from the class of warm-blooded animals, as before from the universe, of some class determined in a manner to us*

unknown, and that this class coincides with the whale-class in all experience. That this operation of class-selection from a class previously selected is strictly analogous to the arithmetical operation of multiplication, or synthesis of numbers previously made by synthesis of the original units, is evident on the slightest consideration. In both cases the result of one operation is made the subject of another similar operation, whence it follows that the symbol representing the relation of the two, which implies simply a change of starting-point, should be the same in both. The difference lies in the two operations as respectively appropriate to their different starting-points. In quantity the primary operation is a synthesis of units, in quality it is the analysis of a presented universe; just as in quantity, then, we take a synthesis for a unit when we multiply, so in quality we may take a class for a universe, and, when we do so, ought to use the same sign as in the other case. Hence, the judgment under consideration falls into strict scientific form as follows:—Whale-selection = warm-blooded animal-selection  $\times$  selection; and this is the form originally proposed in Boole's 'Laws of Thought.' In the example, 'Men are rational animals,' the determining principle of selection is given as rationality, and, the matter being adequate to the form, this is a definition of the concept, man.

Clearly, however, the operations of selection described are *fictitious* so far as the possibilities of real intellectual performance go. The classes in the external universe are beyond the extent of our mental reach, except as we think them determined by their character, although

we determine that character by observation of those within our reach. The mode of logical treatment in question is, therefore, as it stands, a convenient fiction, by which the mind expresses its anticipations of perception. We can, however, transform it, by a slight change of expression, into strict conformity with the logical principle which governs all judgments of perception. Thus in our example the direction given is to select a warm-blooded animal, fulfilling certain conditions, and this will turn out to be a whale. Expressing this symbolically, we have:—Principle of whale-selection = principle of warm-blooded animal-selection  $\times$  principle of  $x$  selection. Thus a judgment in extension, as it is called, may be stated as it is for the thinker, in terms of mental operation strictly.

It will now be abundantly evident that in dealing with quantity and quality alike, the act of judgment asserts *identity between two apprehended results*, which are known as having been constituted by *two different operations of thought*. The duality of judgment is a duality of operation, the identity asserted is an identity of apprehension; and every proposition which is not made by the speaker with consciousness of this duality and this identity does not cover a real judgment in that speaker's mind.

Moreover a judgment to be universally true must assert this identity with reference to the field of abstract presentation, which is the universe of logical and therefore universally apprehended truth; and such a judgment may be interpreted as a principle universally applicable to our expectations of perception, just because it is so made in the universe of concepts.

## CHAPTER V.

THE QUEST OF NECESSITY : SCIENCE OR REASONED  
TRUTH.

IN our search for a principle of unity that endures throughout the flux of personal experience, we came upon the logically essential notion of a permanent basis of conception implied in all experience, and upon the corresponding notion of an external world of perception to conjunctions in which all conjunctions of concepts are referred. Qualitative judgments are made in conception on the warrant of perception, while quantitative judgments are made on the warrant, not of perception, but of the mind's perceptive activity. Language is chosen to mark position, if I may so call it metaphorically, in the inner world of concepts; but the effectiveness of language as a medium of communication—(and the motive of its creation is doubtless quite as much the impulse of pure sociability as the desire for means of discourse)—makes it inevitable that this inner world of concepts should become in the very act of its formation a common world—a universe of thought which it is the endeavour of each to make common to all, and which is presupposed in discourse to be common to all. Hence we



speak of the universe of discourse, to which each man's world of concepts is an approximation, and the truth of which is the truth of the external world, since each man may anticipate with certainty true perception of that world in so far as his concepts and judgments correspond to those of the universe of discourse.

By language, each mind is enabled to suggest to other minds ideas needed for the enlightenment of dark places, and each is enabled to search in the speech of others for guidance, by use of which it may expand its contents to that more than itself which growth implies. A new word is often, to a mind not beset by too many new words, the seed of a new thought. This is a fact which the teacher will do well to remember, while he puts himself carefully on guard against depending on it too much. A commoner service rendered by the words of others is that of suggesting the solution of a difficulty already felt. To state, or even work out with the learner, the solution of a difficulty which he does not feel is to sow seed on stony ground. It is more important to plough the ground than to sow the seed; for the learner will look for his own seed if he wants it. The first step towards knowledge at any particular point is the consciousness of ignorance; and it is only when a mind has so much cultivation, either innate or acquired, as to have quick intuition of ignorance at all points, that words falling on it at random are suggestive of thought. A mind with this degree of cultivation is an actively growing mind, a mind that intends to grow into more than it is, a mind, therefore, that instinctively rejects its own particular

content as the final standard of truth, and is on the look-out for means of development by appropriation of complementary ideas from others.

Truth is of the universal: this is a proposition accepted by all thinkers, however low their actual culture. To scientific judgments there are no exceptions. The illogical observer may say that 'all Englishmen have blue eyes'; but the logical observer expresses himself cautiously, and uses 'some' for 'all,' while his notion of the perfect scientific statement takes the form, 'x per cent. of Englishmen have blue eyes.' A true proposition states a judgment of the thinker, which holds good for all thinkers within certain defined limits of time and place. The thinker is not, therefore, satisfied unless he knows that they do so hold good. If a universal thinker be conceived, whose thought is what the thought of all particular thinkers constantly tends to *become*, then his judgments would be conceived as constituting the body of universal truth which we seek. Our judgments, however, as derived from our individual experience, express the truth of that experience, and no more. Yet the truth we seek is not this truth, but that other of which it is a particularisation consequent on our personal particularity. It is the truth which expresses the facts and the possibilities of universal experience. How then can each thinker as an individual seek it? This is the logical problem which now confronts us.

The direct answer would seem to be that he must seek it in universal experience. He can reach out to others for help, and, by aid of language, add to the deposit of his own experience the deposits of theirs.

But all these deposits do not summarise the whole of humanity's past experience, nor do they touch the future. All men have not spoken the deposit of their experience; much has been deposited that has never been communicated to a single other mind. Take a subject like psychology for example, and consider the difficulties of language which beset the man who tries to tell his experience to his fellows. A partial test of its coincidence with theirs lies, it is true, in their silent assent; but it is a doubtful test, because it is hard to tell whether they really grasp his meaning through his language or not. The case of psychology is the extreme case, no doubt, but it covers a larger share of human interests than immediately appear, since any vitiation of its results vitiates conclusions in every department of social science.

Moreover, even if we could be quite sure that all past experience were in support of a certain proposition—and in many cases we may be practically sure, since some assertions could not often be made falsely without contradiction—how are we to be sure that the future will resemble the past? This is the question which most troubles the conscience of inductive logic. Universality as regards the past is not universality in the full sense. How can the mind of man bring itself to treat the warrant of past experience—incompletely filled up, too,—as a warrant of universality? To the framer of logical systems, intent on demonstration of the basis of truth, this is indeed a stumblingblock. To the educator it is, on the other hand, a welcome foothold. It suggests to him a source of intellectual discontent, and

in such sources of discontent he finds the needed motive to intellectual development which he can help to its natural satisfaction.

The mind in its search for universal truth gathers the most approximately universal it can find, and, having this, is not content. It deciphers gratefully the written and spoken warrant of past and present experience, assimilating all this with, and interpreting it by, its own. Moreover, it searches carefully the possible experiences to which it is subject, to find the maximum of universal certainty. It *expects* too that the future will resemble the past, and, thus expecting, labours on with that inquiry into nature, the logical method of which is called inductive, and regulates the first part of all the natural sciences.

Yet it is not content. The searcher for a truth surpassing in universality the experience that *has happened* to be the experience of individuals seeks an assurance that it *must have happened*. He cannot be perfectly satisfied with less than an assurance of *necessity* in knowledge. Truth is universal if it is necessary, and for a universal knower there would be no difference between the two ideas. For the particular knower, however, it cannot be known as universal unless it be necessary, and cannot be known as necessary unless he be compelled by logical law to think it so. If he could see all his so-called universal judgments as imposed upon him by logical law, then the ideal of truth would be fulfilled for him; his knowledge would be *necessarily* what it is. (I do not say that his play of thought would be.) If he cannot thus see his knowledge as a necessary whole, his

ideal remains nevertheless, and he seeks to fulfil it by realising the conditions of its production so far as he can.

Turning now to the universe of judgment as we lately considered it, we find that in one class of elementary judgments the condition of necessary truth for us is fulfilled. So far as we judge our experience quantitatively, we judge of it as it *must* be for us, beings simply who perform acts of discrimination, and such performance is presupposed in the function of judgment. Thus, whenever we judge quantitatively, we judge with necessary truth. Experience, so far as anticipated in its number-relations, has prescribed for it the form which it *must* take. The mind is therefore satisfied in its demand for necessity, when judgment is applied to the quantitative units which it makes for itself.

But in the universe of quality the case is far otherwise; the elementary judgments are not necessary. We have overcome the chaos of present impressions by assimilating percepts to past images, and surmounted the chaos of percepts and images by analytic judgments which declare permanent principles of perception. And now we find ourselves with a chaos of judgments, calling themselves universal and without the form of necessity. How can we aim at imposing this form of logical necessity upon them?

In so far as we see clearly the abstract field of conception to which judgments apply, we see coincidences in it other than those in the making of which we found it; and whatever coincidences there may be, we can see them if we look with sufficient intensity and grasp of attention. Moreover, if we can put together any

number of concepts, as related in a way that survives the logical test already considered under the head of perception, that synthesis of concepts, not only is, but must be : a synthesis of concepts—as of percepts—that is possible in the full glare of attention is also necessary. The concepts may be unreal, the judgments may be false, but the synthesis nevertheless is necessary if it stands the test. Moreover, after such a synthesis of judgments is made, presenting the mind with the sum-total of asserted truth, any logical judgment made about it is necessarily true, provided the original judgments be true. In other words, its truth follows *necessarily*, or is inferred, from theirs. For example, the two judgments,  $A=B$  and  $B=C$ , are expressed together in the synthesis,  $A=B=C$ , whence it follows as necessary consequence that  $A=C$ .

If we can transform the chaos of isolated judgments into a cosmos of related judgments, then relatively, though not absolutely, we can attain to our ideal. Not absolutely, because if we omit the mathematical sciences, we do not know that the primary judgments are necessarily true ; and the significance of this difficulty will become more evident when we consider the search made for first principles in science, so far as they are not purely logical or descriptively conventional. But relatively it would thus be attained, because the *interdependence* of all judgments would be known as necessary, and thus assurance given that they all stand or fall together. In the relative sense, therefore, we may search for necessity ; and it is evident that, with this search as object, we approach

towards the goal of normal development, the unification of mental content.

This search for necessity is easily seen to be at the bottom of the little child's demand for the reasons of events observed, or assertions made. The 'Why is it so?' or 'Why must it be so?' with which the child confronts its own judgments, and the statements of others, is temporarily quieted by the inference of one judgment from others already made; and we are all familiar with the impracticable questions which active-minded children still persist in asking, when we have given them satisfaction up to the limits of our primary judgments; after which we can only fall back, more or less reverentially, on the assertion simply that we find it so in all our experience. And I have no doubt that much for the child's future depends on the attitude of mind suggested by the manner in which we make this answer. We may make it blankly, as a stop put on all further workings of thought in the direction of discovery, and thus check, not only inquiry into the causes of Nature, but also interest in her mysteries; or we may make it with simple reverence, as a great mystery—unknown and unknowable—on which it befits the mind of man to dwell with wonder and awe; or, again, we may make it with equal reverence, as surpassing for the present our powers of comprehension and still more the child's undeveloped powers, but yet as a mystery before which it is the inherent duty of man not simply to prostrate his intellect, but into which it is his duty ceaselessly to inquire that he may understand it. This last is the way in which the *philosophic* teacher answers the child's

impracticable question, pointing out to him that the answer to that question is to be sought in a long and difficult quest after wisdom, which it is his natural destiny to undertake. This quest the teacher may, to some extent and by slow degrees, define, as including the vast endeavour of science to build all knowledge into such a united whole that we may be able to refer any fact to a reason for it in other facts from which it follows, whether these be new facts found by inquiry into natural events, or old truths already stored away in experience of the past. And he may further cultivate the will to undertake such a quest, and the spirit in which it can most joyfully and best be undertaken, by sympathy and support given to the child's natural *wonder at the unknown*, and stimulation of the child's natural *belief in the possibility of knowledge*. This double attitude of mind is the unity of the scientific spirit with the spirit of religion on its speculative or philosophic side.

Looking at the matter broadly, there are three attitudes of mind in accordance with which we may train a child to regard the great problem of necessity, or—what is the same thing—finality, in knowledge. It may be treated as a matter of indifference, about which we cannot think, and need not care. Or it may be treated as a purely insoluble problem, and this in two ways: we may either refer the unintelligible in detail to the arbitrary will of the Supreme Ruler of the Universe, regarded, however, as friendly to the interests, and willing to direct the actions and modify the circumstances, of individual men; or we may refer the remainder, assumed to exist ultimately



after science has completed its work, to the agency of an unknown power out of any relation, either intelligible or voluntary, to man. The first of these may be called the way of *unphilosophic religion*; since the relativity of man to the unknown is assumed, and this is of the essence of religion, while the ultimate intelligibility of the unknown and its practical fitness as an object of present quest is denied, and this denial is the denial of philosophy. The second way is that of *unphilosophic science*: it places no bar on the progress of knowledge until new departures become necessary; then to the more ardent it becomes a doctrine of despair, to the less ardent a counsel of indifference, because every barrier tends to appear as the ultimate blank wall of unknowability.

For the third attitude of mind ultimate insolubility of the problem of knowledge does not exist; the problem is to be pursued to its solution despite all difficulties, these being regarded simply as indications that new departures are necessary; ultimate truth is a reality, and science a real effort to obtain it. Nevertheless, it presents a mystery to the thinker all along the line of his thought, a mystery sometimes deep and shadowy, sometimes slight and pleasant like a sunlight haze—a mystery that excites the *passivity of wonder* and stimulates the *activity of scientific effort* at once—a mystery that suggests, therefore, the presence of a knower for whom it does not exist, and towards the realisation of whose knowledge as its ideal our knowledge moves.

Science and mysticism are, therefore, not mutually exclusive of each other, but the contrary. They are twin stems springing from the same root of philosophy

—the love of wisdom. More specifically, they are the double response which the mind makes to its own demand for necessity in knowledge. The philosopher's practical advice to the child is, as we have seen, the advice to inquire into the connection of events in nature and the connection of judgments in his mind. We have already briefly indicated the nature of his activity under the first of these counsels, and we have now further to consider the other part of his work, the unification, namely, of such knowledge as he has, and the detection of all that is implied in it. This unification is the work of reason, and the new truths detected are said to be inferred from the others.

Reasoning is as much the synthesis of judgments as perception is the synthesis of impressions. Just as identical impressions, presentative and re-presentative, superpose in sensory consciousness without any deliberate act of superposition, their associated parts falling into synthesis if non-contradictory; so identical terms in different judgments superpose, generally with more or less deliberate consciousness, the other terms falling into position above and below, or otherwise relatively to the identified terms. At the same time the conceptual extent and position of each term, as greater than, equal to, or less than the others, is subject to attentive intuition. Take, for example, this condensed argument, 'The labourer, being a man, has a right to opportunities of self-development.' The concept, labourer, is superposed on that of man, and exceeds it in meaning; the concept, man, is superposed on that of individuals having the given right, and is intuited as not extending beyond

its limits. This, in metaphor, is the argument, in which the mind sees, with a greater, or less, or vanishing effort of attention, that 'the labourer has the rights,' &c. If a thinker does not endorse this conclusion, it can only be because he objects to one or other or both of the judgments on which the total synthesis was founded. The argument may be symbolically expressed as follows. Let  $l$ ,  $m$ , and  $r$  stand for the three terms, according to the initial letters. Then,  $<$  and  $>$  being the signs of inclusion and exclusion respectively, we have:—

$$\begin{array}{ll}
 l > m \text{ and } m \overset{>}{\text{OR}} r, & \text{the premises,} \\
 \therefore l > m \overset{>}{\text{OR}} r, & \text{the argument,} \\
 \therefore l > r, & \text{the conclusion.}
 \end{array}$$

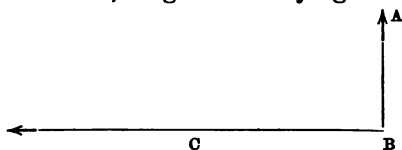
This is expressed in terms of intension, the concept, labourer, being greater intensively than either of the others, and so on. We may also express it in terms of extension, the class of labourers being less than either of the others, and so on.

$$\begin{array}{ll}
 l < m \text{ and } m \overset{<}{\text{OR}} r, & \text{the premises,} \\
 \therefore l < m \overset{<}{\text{OR}} r, & \text{the argument,} \\
 \therefore l < r. & \text{the conclusion.}
 \end{array}$$

Such an example as the above falls easily into the old syllogistic form, into which, however, it is not easy to make all arguments fit. Consider, for example, the premises:—

A is north of B, and B is east of C.

These are materials, not for a synthesis of qualitative identity, but for one of spatial position. Construct by thought, or by act, in the space-continuum to which the judgments refer, a figure embodying them.



Additional results can now be intuited directly. The careless thinker might not improbably make the lines AB and BC equal in length, and assert that

A is north-east of C.

The careful thinker would limit himself strictly to the given facts, in making the figure, and would thus easily note that the relative length of these lines must be given, in order that A and C may have any determinate position with respect to one another.

In order to illustrate the use of the equational method of expressing judgments, let us consider one more example :

All birds are feathered, and all owls are birds.

Understanding these terms in extension, and using initial letters for symbols, as before, and  $v, v'$  as symbols of further selection, we have :—

$$b = v f \text{ and } o = v' b.$$

This becomes an argument by the identification of the common term  $b$ , which is equivalent to the substitution of the equivalent  $b$  from the first equation in the second. Thus :—

$$o = v' b = v' v f;$$

and, neglecting the old information, we have the new judgment:—

$o = v' v f$ , i.e. All owls are feathered.

Judgments, it is evident, cannot be used in the same argument unless they present points of identity. Otherwise, they simply fall apart: only by the superposition of identities can logical position be *inferred*. Errors in reasoning arise most frequently from lack of clearness, whereby terms are identified, either by equation or inclusion, which are not identical to clear apprehension. Thus occurs the fallacy of four terms, in which, from the premises A is B and B' is C, it is inferred that A is C, because B and B' have been taken as identical by a confused thinker when they are not identical. Similar confusions may be made about the other terms, as when A is identified with an A', or C with a C'. Then, again, there is the fallacy of undistributed middle, which occurs in the argument:

All A's are B's, and all C's are B's;  
 $\therefore$  all A's are C's.

Here the A-class is identified with part of the B class, and the C-class also with part of the B-class, but there is nothing to show that these parts of the B-class coincide, even partially, with one another. No synthesis, therefore, can be made of these concepts from which a relation between A and C could be inferred; but the cloudy mind may make a false synthesis, and, if uncritical, may not find it out. Finally, similar confusions may be made about the extent, or distribution,

of the other two terms, giving rise to the fallacies known as illicit process of the major and minor terms, i.e. the predicate and subject respectively of the conclusion. For example, in the argument,

Some A's are B's, and all A's are C's;  
∴ all B's are C's,

there is an illicit process of the minor term B, part of which only is considered in the premise, while an assertion about the whole is made in the conclusion. In all these cases, the fallacy is caused by the thinker's uncertain grasp or confused vision of the concepts with which he is dealing. The remedy lies in steady consideration of these, till uncertainty vanishes, and vision of the whole consequently clears. This is analogous to the remedy for false perceptions; the difference lies in the abstractness of the objects attended to, and in the more consciously deliberate nature of the survey taken. Each term may be surveyed separately to see that it has the same significance in its two occurrences. The study of ordinary logic, in any mode of its presentation, is specially useful as supplying directions for the testing of accuracy in argument. Our business, at present, is however with the more general problem of determining the conditions of activity, as well as accuracy, in this, as in every other, stage of logical development.

To the educator, activity is at least as important as accuracy. His difficulties in training the mind to reason, and indeed to think generally, fall into two classes—the difficulties of getting the student to go, and the difficulties of getting him to mind where he goes.

One pupil is passive ; he contemplates the given factors of thought, but does not think ; no opening for thought occurs to him, and he is slow to move in search. In him, intellectual movement must be stimulated ; he is often a great deal more improvable than he seems ; after much stimulated movement he becomes more enterprising, finds a new power, and enjoys its exercise. Still, he is a difficult pupil, apt to be spoiled, or at least kept back, by despairing neglect or equally despairing over-help. Despair in a teacher is criminal ; for the most feeble thinker will be trained to think better than he does, if he be constantly encouraged to try, and persistently expected to succeed. To the teacher, no less than to the physician, is necessary a full measure of the capacity for taking an interest, both kindly and scientific, in making the best of a bad case ; for he, like the physician, exists because human nature is weak, not because it is strong.

Another pupil is active, perhaps hasty ; he goes to work vigorously on the thought-factors before him, conceives, judges, reasons, but all inaccurately, because he does not contemplate his results steadily to see whether he can accept them when made. A firmer grasp of logical law is useful to him, because it supplies him with deliberate tests by which he can clear up his muddled view of truth ; but, above all things, he needs to acquire the habit, already described, of steadily surveying each piece of thought-result to see whether it stands the fire of clear apprehension. By constant self-criticism, more accurate instinctive habits of synthesis may be formed ; and the teacher's work here

is to act the part of fellow-critic, gradually tending to leave the responsibility of criticism on the learner himself, who has to take it all in the end.

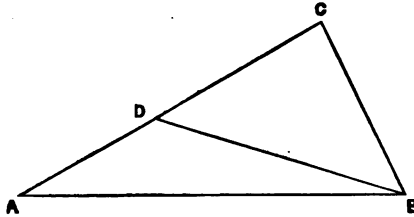
The good reasoner, however, is something more than a person who can draw correct conclusions from ready-made premises. He has taken a large work in hand—no less than the synthesis of all experience—and he may have to find premises—one or two or any number—leading to conclusions expected to be true, or to find premises that, with others given, will yield conclusions as yet unknown. He must be able to synthesise the judgments presented to him with judgments not presented which come up to his mind, whether these come up without effort or by a voluntary effort of search following the suggestions of the concepts in the judgments before him. Thus his position is strictly analogous to that in perception, when the represented rises, or is raised, to coalesce with the presented at identical points, the associated impressions in this case, as the conjoined concepts in the other, falling into their places in the total synthesis. It is easy to put given premises together correctly: it is not so easy to bring premises from various stages of obliviscence, to make an argument of which some factors only are given, especially if the argument extends to a synthesis of many judgments.

The test, then, of a good reasoner is his ability to find the missing elements of an argument and make them with those given into a reasoned whole. Give him a few disconnected judgments, whether all as premises or one as conclusion, others which will serve



to connect them being known to him but not indicated, and require a demonstration. This is the kind of problem constantly presented to the student of geometry; and the logical training of this subject of study is made fully available to him only if he make the attempt to solve its problems for himself. It is not important at first that he should succeed, but it is important that he should try. As an illustration of argument we cannot do better than take a familiar investigation of geometrical proof.

In the triangle  $ABC$  the side  $AC$  is greater than the side  $BC$ . Prove that the angle  $ABC$  is greater than the angle  $CAB$ . Here two judgments are given, one of which is to be inferred from the other with the aid of certain known judgments and syntheses of judgments that have to be found.



1. { *Given judgment* . . . .  $AC > BC$ .  
*Judgment to be inferred* .  $CBA > CAB$ .
2. Synthesis of judgments remembered belonging to the same class as required one. This comes up involuntarily in the quick mind, and by deliberate search in the slow. } If  $AC = BC$  then  $ABC = CAB$ .
3. Construction suggested by the synthesis as likely to be useful. } Cut off  $CD$  on  $CA$ , making it equal to  $CB$ .

4. Recurrence to the remembered synthesis. }  $CD = CB, \therefore CBD = CDB.$
5. Intuitive judgment . . . {  $CDB$  is exterior angle of triangle  $DAB,$
6. Remembered consequent judgment. }  $\therefore CDB > DAB.$
7. Intuitive judgment . . .  $CBD < CBA.$
8. Synthesis of all the judgments relevant to the conclusion, i.e. concerning angles. The middle serves to identify the predicate of the first with the subject of the third. }  $\left. \begin{array}{l} CAB < CDB \\ CDB = CBD \\ CBD < CBA \end{array} \right\} \therefore CAB < CBD < CBA$
9. Intuition of the judgment  $CAB < CBA$  in this synthesis, and its recognition as the conclusion required.

In this example, it is evident that a more able reasoner would be able to find the conclusion, given only the relation between the sides. This finding of a conclusion is the discovery of new propositions; and there is no reason why the elementary student should not discover easy conclusions with their proofs, though he may require assistance in doing so. Certainly to the half-developed mind of youth the attractions of discovery far surpass those of proof, and the teacher should note this fact and act on it so far as he can. In the above example, the increase of difficulty is scarcely perceptible when the demand is put in the form, 'If  $AC$  is greater than  $BC$ , what follows about the angles?' And there is another way of putting the question, in which the difficulty is considerably diminished, and the interest increased at the same time. The teacher may begin the lesson by distinct reference to the previous piece of knowledge of the

same kind—i.e. 'If the sides are equal the angles are equal'—and then ask the learner to find out, and prove, the corresponding truth when one side is greater than the other.

It will be evident from this example that the play of intellectual activity involved in a study of elementary geometry is considerable and varied, when *no* truth is treated simply as the assimilation of book-work. This varied play is lost when the subject is merely *understood*, and gained only when it involves a constant effort to discover proofs, to invent constructions, and even to ascertain new conclusions. The gain, be it remembered too, is not simply proportional to the amount of success; in most successful efforts, some work is done which clears up old ideas, illuminates new ones, and tends to produce habits of reasoning activity. On the practice of learning proofs without understanding them, it is unnecessary to say anything. Though it has not yet died out in this enlightened age, no words of mine could condemn it so strongly as I believe it ought to be condemned.

It is easier, however, to fall into the more innocent-looking error made by teachers who depend on merely getting their pupils to understand what they and the textbooks say. Such training is well enough in its way—when it is not taken to be all the training required: it is good to be able to understand another person's argument certainly, but this ability should be broadly distinguished from the more important and more necessary ability to make argument of one's own. Practice in understanding another is undoubtedly a preparation

for ability in original argument, but preparation does not by itself lead to the production of that for which it is a preparation. Practice in original argument is a necessary condition of ability in original argument, and the danger is that the other less difficult practice should be allowed to crowd it out of existence. So students are found in abundance who, without any sense of incongruity say, 'I do not *remember* how to prove this,' as if remembrance of another's train of thought were the *main* business of a thinker, and not, as in truth, a most useful subsidiary only, good for stimulus and very good for guidance and example, but a *means* always to the thinker's proper end, the self-development of his own thought into harmony with the universally possible thought or truth.

Let us now revert to our general statement that the total act of reasoning is analogous in all its details to that of perception. In both we have :—(1) the given elements, which may be meaningless taken alone ; (2) the required elements, not given but fetched on suggestion, which, by presenting points identical with the given elements, make construction possible ; (3) the synthetic act, or mental grasp of all these elements as one ; (4) criticism of the whole, as a whole that stands the logical test of identity in its identified points. This last act may be, and often is, omitted ; but its performance is the certain guarantee of accuracy, as supplying the assurance that errors or omissions have not been made. And in the case of reasoning we have finally the act of intuition and selection, resulting in judgment respecting new connections which appear in the whole. The inquiry on

which the argument is based decides the direction of this selective act, but such inquiry may be directed simply, as scientific inquiries often are, to an exhaustive investigation of facts implied. In that case the object of the ratiocinative act is purely the grasp together of all the judgments as constituting a single whole, which may be surveyed afterwards in the analysis of separate inferences, and indeed must be so surveyed when placed definitely before the mind. Such a whole of argument is strictly analogous to the percept, but the percept can be grasped, as it cannot, without any consciousness of analysed detail. In perception proper there is no selective intuition concerning the parts of the whole. The object of the perceptive act is the intuition of the whole as whole, and the parts do not become explicit in consciousness. Hence, there is room for the after-process of analysis which corresponds to the final process of inference in argument.

The difference between perception and the total argument, which, without the after-inferences, is its true analogue, is still a great and significant difference, all, namely, that there is between the perception of unanalysed fact and the vision of knowledge as a whole understood in its analysis. The percept is apparently a solid whole, constituted by a barely voluntary act, of which the mind is not clearly conscious, and the character of which it knows only by inference and on reflection. The synthesis of the percept is first made apparent by its analysis in judgment. With the synthesis of judgments, which constitutes the argument, and is at the basis of all inference, it is far otherwise. The elements paired in a

judgment are logical elements of which the mind is distinctly aware, because it has selected them as naturally defining each other. The search for identical elements is a voluntary and conscious search, though it tends to become instinctive more and more, as the play of logical imagination becomes more energetic and orderly; and it is always a search that begins, and ends, in distinct consciousness of the object which it means to find, and finds. The synthesis, again, is a synthesis of which the elements are known in their separateness; and the process of correction, when performed, is as consciously critical as the process by which a piano-tuner tunes a piano. Thus, treating as the result of reason, not the fragment which is called the conclusion, but the argument in its entirety—this is not solid and opaque like the percept, but fluid and transparent, the emphasis in the act of intuition being laid equally on the unity of the whole and on the necessary interconnection of its parts—on its character as a multiplicity necessarily one. In such a whole the formal ideal of knowledge is fulfilled, so far as the little fragment of truth included in it goes. It answers to the 'What?' of fact, the 'How?' of judgment, and the 'Why?' of inference at once.

Some writer says that a woman's ideas are stuck in her head like pins in a pincushion. Without agreeing with the statement, we may appreciate the metaphor, so well does it picture forth the condition of mind in which persons perceive and judge but do not reason—the isolated independence of thoughts that have not been woven into the synthesis of reason, and that can therefore be removed one by one, each without disturbing any of the

others. Remembering the close connection of this higher intellectual stage of reasoning with the two stages that have gone before, we see that such a failure to reason when one perceives and judges is only explicable as an arrest of development—a failure of continued interest in the orderly unification of all intellectual content. The good reasoner must be a good observer within the limits of his sense gifts, except in so far as his habit of attention has become abnormally abstract. This is not an uncommon case, but even then he has in him the makings of a good observer. Moreover, he must be also a clear-sighted judge, though his judgment may be narrow if his mental content be of limited range. The good observer, on the other hand, may not have gone far enough to make him more than a good observer; he may have been stopped by the difficulties of abstract attention in clear judgment, or his thirst for knowledge, in its true form of complete unification, may have failed him later on. This latter case is perhaps not uncommon.

## CHAPTER VI.

UNITY OF COMPLETE AND UNIVERSAL EXPERIENCE:  
SCIENCE AND PHILOSOPHY.

IN each complete act of reasoning the formal ideal of knowledge is fulfilled. What we find in the parts of knowledge we look for in the whole; our logical universe is not merely a universe of permanent apprehension, or of universal discourse. It is a universe of reasoned truth, implying the aspiration to necessary knowledge. We conceive of truth, not as an unlimited sum of facts to be perceived, nor as an indefinite sum of rules for its perception, but as a related system of law each member of which implies the whole.

All science is the attempt to realise in thought this ideal of a self-developing whole of law. The logical, or formal, portions of every science realise this ideal; but the only sciences which realise it *throughout*, for that portion of truth to which they apply, are the pure abstract sciences of mathematics, because in these the mind can make its abstract material, and can therefore deduce the whole science from elementary perceived facts which are also of the nature of first principles, with the introduction, whenever necessary, of new facts which it likewise makes. When, however,



the material is given in sense-experience, comparatively ready-made, though dependent for its existence in experience on the activity of intellect, the science can still be construed as a related system self-developing necessarily from some origin; but that origin itself cannot be demonstrated as necessary. At most, we can only say that our original first principles have the warrant of universal experience, so far as it goes. Moreover, in some cases we perform the act of judgment which constitutes a first principle in such a way that, by being half a definition, it is half a necessary truth; and the more closely the science has been brought into correspondence with the ideal form the more does this tend to be the case.

We find an example in the laws of motion, from which, in conjunction with mathematical law, Newton proposed to derive the abstract science of dynamics. These imply a twofold act of logical abstraction and logical definition. The science deals with the moving of the movable, and this conception divides itself readily into the two conceptions, (1) of a passive or inert factor called matter, measured afterwards by one of its effects, (i.e. gravitation intensity), and (2) of an active factor called force, which moves this inert matter, and which is measured also by its effect, as denoted jointly by the measure of the matter and the measure of the change of motion produced. In the first law of motion, the character of matter as inert, or non-self-moving, is defined, and in the second the quantitative relation between active force and the motion of the mass moved. That such laws as these are not simply

derived from experience is evident : they are essentially artificial products, the result of much reflection, carefully framed to express the facts of experience in the form of universal laws rather than of abstract definitions. Yet it is also evident that they come much closer to immediate experience of fact than later conceptions of first principles, on which, as of wider-reaching import, there is now a tendency to build the science. I allude more especially to the modern conception of a universe of energy which, changing its form continually, remains constant in quantity.

In sciences, such as chemistry, belonging to the experimental group the ideal form is very incompletely realised ; the mass of partially, or not at all, digested facts is very great, although in these cases also progress is made, not only by mere discovery of fact, but also by more organisation of fact already discovered. Perfect organisation of fact depends on the discovery of first principles from which to deduce it ; and the more deeply a science is immersed in the concrete realities of experience, the more difficult is it to frame first principles which shall express immediate fact and be, at the same time, first principles from which the science may be deduced. 'The more impossible,' it would have been truer to say : if the second and essential condition be fulfilled, the first condition generally cannot be. The first principles of the more concrete sciences are, indeed, not facts, but fictions, far removed from facts perhaps, though yielding up the facts on application of the reasoning process. The search for one of these first principles is, in the first place, a fetch of imagination to find all the

judgments which can be connected together in a reasoned whole, and, in the second place, it is the creation of a conception, out of material already in experience, yielding elementary judgments from which the whole can be, by logical law, deduced. A first principle of this kind, which is not susceptible of immediate proof from elementary fact, either directly as in mathematics, or indirectly as in dynamics, is called a 'hypothesis.'

Such a first principle is suggested—not by mere experience of fact, but by a reasoned experience—and it commends itself to the mind as a possible origin for the deduction of experience. For examples, consider the wave-theory of light and the atomic theory in chemistry. In the first case we have a single fiction, i.e. that space is filled with a fluid medium in which luminous bodies propagate waves, and, applying to this conception the truths of mathematics worked up into the laws of wave-motion already decided in hydrodynamics, all the observed facts of light can be deduced. The warrant of such a hypothesis is very strong, since it alone is enough to account for a whole department of science as explained otherwise by laws already known. In the other mathematico-experimental sciences, the hypotheses are for the most part of this kind, and the sciences tend to assume a deductive form, though they are mostly subject to continual disturbance from the discovery of new fact, and the consequent need to develop further the fundamental conceptions. In our second example—the atomic theory in chemistry—we have a very complex fiction, to which we still add more as we require means for the further explanation of our

facts, and which manifestly is in need of some higher philosophic reach, to reduce the science, through it, or by some new conception, to the unity of dependence on simple principles. And this need of something more satisfactory as the basis of theory is shown again and again in the endeavours of scientific chemists to penetrate further into the theory of the subject, by the invention and attempted verification of new conceptions.

The ideal form of completed science being self-development of subject in logical sequence, each truth appearing as a demonstrated conclusion, it is of fundamental importance that the teacher of science should have this ideal, and the conditions of its attainment, before him throughout all his work. He should feel, and his pupils as led by him should feel, that discontinuity and irrelevance are logically distressing, the gaps and blind alleys of a badly composed science as painful as the holes and loose ends of a badly woven argument. He should feel, and make it felt, that facts, and even arguments, when disconnected, are not mind-satisfying, and that, therefore, a means must be sought, and sooner or later found, of weaving such facts into a single system. The teacher, then, must ask two questions. What stage has this particular science reached in fulfilment of its ideal? How can study of it in its earlier stages be combined with consciousness of the ideal, and a patient looking forward to its realisation?

The first question is not difficult, to one who has studied his subject well, and with some consideration of its logical method; the main point is that he should ask himself the question. To the second question, how-

ever, it is by no means easy to return a satisfactory answer, *and to act upon it forthwith*. It is not part of the present design to answer this question in full for all the sciences. The teachers of each science will do this best for themselves. Nevertheless, to make the import of the question more evident, let us briefly review the field.

As already noticed, the question does not arise for the mathematical sciences, because their first principles are also their elementary facts, points of new departure being supplied, when necessary, by addition of new conceptions to those first principles. The beginning of mathematics in a child's knowledge is, therefore, its true beginning in logical development. Thus it is the type of a naturally deductive science, knowledge of which is, at every stage, in the form of perfect science, demonstrated in sequence from its earliest truths. Hence its study is the natural school in which the mind attains full consciousness of the ideal form of knowledge, and in which it acquires the habit of pursuing separate truths to their consequences regardless of what those may be. The mind acquires this useful habit, because mathematical study requires it; and just for this reason, mathematics is not the natural school in which to awaken the first *interest* in reasoning. It asks no questions, but pursues consequences relentlessly. The young mind asks questions, and learns first to reason by answering them; but it does not pursue consequences till it is already active in reasoning, and has acquired a pleasure in its performance. Then, and not till then, is it ready to ask, 'What does this prove?' while long ago it was ready to ask, 'Why is this so?' Hence

the troubles of the mathematical teacher—the learner fails to take a natural interest in consequences flowing from the conception of equilateral and other triangles, and the teacher has need of much art to nurse that interest by his treatment of the subject.

Next in order come the various branches of mathematical physics, aspiring throughout to the deductive form, and reaching it fully after the elements are passed. But the elementary treatment is often troublesome and unsatisfactory; and it is sometimes not at all clear to the learner, or possibly to the teacher, whether he is dealing with generalisations of fact or with abstract hypotheses completely warranted by fact. In so far as under his treatment the first is the case, the science is inductive; in so far as the second is the case, it is deductive, with a true hypothesis for its origin. Teachers, and even the writers of textbooks, do not indeed always quite know where *logically* they are themselves, and, so far as they do know, may not have made up their minds which basis of demonstration is suitable for their educational purpose. And since the general educational purpose has to be adapted by each teacher to the circumstances of the case, it is impossible—happily so, I think—to lay down general rules on the subject. This much, however, may be said: the purely deductive treatment presupposes a mind trained, or innately able, to take keen interest in demonstrative reasoning, and presents to such a mind the serious logical difficulties incident to the framing of suitable first principles. On the other hand, the inductive method allows of the appeal to experience at all new departures, with the rousing of that natural interest in the concrete upon which so much

depends during the semi-logical period of mental development. We have here, indeed, a real clash of educational motives, which tends to produce uncertainty in educational treatment. *The order of development from true hypotheses—the laws of motion suppose—is not the natural order of discovery, though it is the natural order of reflection, and the only satisfactory order to the reflective mind.* The general solution of the difficulty, for the average learner, who begins during his not very reflective days, appears to be somewhat as follows. First, let him study the subject in the observed facts, till the mind is familiar with them and their logical consequences, and somewhat dissatisfied with their empirical and disconnected origin. Then, let him search for first principles, following close on the actual history of discovery. Lastly, let him begin at the beginning and work out the whole deductively. So far as he can, the teacher should make the learner thoroughly discontented with his knowledge in each stage, on his passage from it to the higher stage.

In dealing with a science of experiment or observation, such as chemistry or botany, the teacher is generally more decided in his course. It is inevitable that he should begin with the facts, pursuing their investigation by experiment and observation; and this is right. But often enough he practically stops at the facts, or raises the questions of theory and hypothesis, not as questions, but as dogmatic assertions blankly assumed, without any indication of the inquiry which led to them, or the nature of the final proof to which they are held subject. Thus a good beginning is followed by the confessed failure of dogmatic assertion,

the ideal of knowledge is broken and defaced, and the average student of natural science, when he comes later to reject the prevailing dogmatism of his childhood, is apt to content himself without any inquiry into the first principles of his subject. True progress may, however, be made in this, as in the other case, by raising the question of a search for first principles when the pressure of disconnected fact begins to be felt, and then following the original investigators in their search, after which comes clear exposition of the connected theory.

Enough has been said to show that the study of science in general is conducted most naturally, and therefore best, by the distinction of three logical stages, which, however, are by no means kept entirely apart in the three historical stages which correspond to them. Each stage is logically prior to, and implies the growth of interest, in the next, for which reason the historical stages arrange themselves, though with less precision, in the same order, but overlapping each other.

1. There is the stage of induction, analogous to perception, in which truths conceived with good reason, such as the warrant of all available experience, to be true are reached.

2. There is the stage of philosophy, in which first principles are discovered by invention of hypothetical judgments, and their trial and correction as principles adequate to experience at least, and principles the contradiction of which contradicts experience at most. This work of trial and correction implies for its completion the building up of the science, and presupposes



also the completion of the facts, since new facts may clash with the consequences of the assumed first principles. It is, therefore, a work that continues to go on throughout the whole development of the science.

3. There is the final stage of deduction by which the science is formally constructed as science, or a demonstrated whole. This may be called the stage of science or knowledge, since it is in the form of demonstration only that the mind can be said fully to know its object.

The three stages, thus mutually implying and supporting each other, we may call, from our logical standpoint, by the name of the logical method which applies to each, the stages of Induction, Philosophy, and Deduction respectively. The last of these methods comes first to light in the development of thought, and its character is familiar to the reader who has followed me so far. And to him also the truth will be self-evident that, though induction precedes deduction as a logical act more or less imperfectly performed, the inquiry into the exact nature of that logical act is naturally later than the parallel inquiry. Early induction has indeed no logical method: it simply gathers up the judgments commonly made by observant persons, taking general assent as a warrant of their self-evidence. The idea of inductive method develops later, after habits of deductive logical construction have been formed, and such knowledge as there is has been woven into the form of science. The mind is then conscious of truth as the sequence of judgment: it treats all judgments as originating in other judgments;

A is B *because* C is D: it explains, and explanation consists in the reference of doubtful judgments to an origin in judgments accepted. So as there come upon it from time to time new revelations of fact from the external world, these must likewise be accounted for—referred to some ‘because.’

In a very primitive stage of intellectual development, this reference is made in a judgment that some power makes it happen, by a simple exercise of will, as arbitrary as that by which a naughty child is supposed to break the furniture. This exercise of will is taken as the ‘cause;’ some person makes the event occur. For instance, a believer in the Celtic fairy-myth would have accounted for the fact that all the milk in the dairy turned sour, by the assertion that an ill-disposed fairy came in at night and spitefully overlooked the milk-pans. We may suppose her son—an exceptional boy, with growing logical instinct—asking *why* the fairy was spiteful and did this; and concluding, in strict accordance with the prevalent myth, that the family had in some way offended the fairy. The offence he might assume to be some one of the several kinds of offences which mortals could offer to fairies, and one of which he was aware had been offered, such as interference with the fairy dancing-ground. Or, being of a sceptical turn, or perhaps not being conscious of any offence already known as embodied in the fairy code, he might set himself to devise experiments with a view to ascertaining on what kind of mortal acts evils like the malicious souring of the milk follow. This would be difficult, because the list of fairy punishments is indefinite; and the possibility of

accidental coincidence would, no doubt, occur to him, and impel to the repetition of the experiment. Moreover, he would need to be a daring boy, regardless of the terrible punishments which he might bring on himself. Then, too, it would be easy to account for the failure of his experiments, because the fairies are notoriously capricious. However, if, notwithstanding all these drawbacks, he arrives at a conclusion, it must be, as his inquiry implies, in the form of a universal judgment respecting the laws of fairy nature. Such laws discovered, or supposed to be discovered, by others before him, he may in this way verify; or he may add a new law to them such as, 'If a mortal interfere with a fairy dancing-ground, the fairies will take revenge by souring the milk, driving away the cow, or in some other similar way.'

This supposed investigation of the believer in fairies reflects the process of thought which the vigorous mind inevitably applies to the explanation of events, as faithfully in general outline as any inquiry in modern science. The difference lies in the conception which the mind brings to the problem. The modern mind has discarded myth after myth, as theories of the laws by which things cause events, in accordance with the growth of its natural impulse, as it develops, to think events in experience after the same manner as it thinks judgments in the anticipation of experience.<sup>1</sup> If it does not do this it fails to realise its unity, knowledge is cut in

<sup>1</sup> We have already seen that even the characteristic human demand for individual liberty of will, resolves itself into a purpose of self-identification with universal truth.

twain, there is no way by which the happening of events can be made part of the reasoned system of truth. The modern mind, because an adult mind *consciously* seeking unity, must, then, look upon nature scientifically, as a possible system of knowledge governed, not by things that cause events, but by laws of their occurrence. So we change our formula: we do not say, 'If you do this the fairies *will* do that always or generally'; but we say, 'If such an event occur, such another event occurs— if the temperature rise to so and so, milk turns sour in so many hours. And it is manifest that our change of formula is very favourable to observation and experiment. It limits the field of our inquiry to circumstances naturally connected, as the wills of mortals and fairies presumably are not, and it renders all our hypotheses respecting the reason or causal law of the event much more susceptible of verification. Our myth of law has all the advantages incident to its production by mature logical thought, as well as the advantage essential to its form of belief that nature can be an object of science or related judgment, its laws being continuous with the laws by which that object is understood by us.

From this standpoint every event that occurs must be accounted for. If A sees a ghost, then science must account for the fact, though A may be ready to account for it very simply: the seeing of the ghost is a natural event, putting aside the implied meaning of the word 'ghost.' And the account given by science is always by way of the assignment of natural causes; A saw the ghost because his nerves were in such a state, (this fact being presumably proved), and persons in such a nervous state

may see ghosts. In this we have a likely explanation, though not a proved one, because it does not exclude the possibility of other causes. And here comes in the principle which the idea of science, as the explanation so far as possible of the unknown by the known, necessarily implies: a new hypothesis should never be introduced for the explanation of events that can be explained without it. Only when the old explanation breaks down, are we entitled to cast about for a new law of nature. The inductive search is always a search for *complementary* truth—universal judgments and sequences of judgments in argument by which fact may be explained.

Towards the opposite pole of knowledge, is the search of philosophy for first principles, and finally a first principle capable of explaining all natural law. This inquiry, in its most general form, is directed to discovery of the universal principles of permanence and of change, of the conservation and the transformation of things.

Our purpose of illustrating the method of inquiry will compel us to dwell on the conceptions concerned, in their present stage of development. Of individual things, as we apprehend them, some change when left to themselves and some do not change: the former we distinguish as living self-changing things, while the others are dead. But these dead things change also under certain circumstances, which we assign in stating the immediate law of change; and, in popular language, we refer these changes to certain so-called forces which act on the dead things. Each of these conceptions—that of the living and that of the dead—tends to absorb

the other. Popular thought tends to deal with the idea of life by the conception of passive *matter* in which resides certain living *forces* that cause it to move and change. And, on the other hand, science shows that some of the forces which move dead matter are forces inherent in dead matter, by the activity of which the matter changes not, but the arrangement of the external universe does: the universe, as filled with dead or inorganic matter, transforms itself according to law, but the matter does not change in its quantity nor the energy inherent in it. Here then we come upon a great principle consistent with all we know of inorganic nature, the principle of the *conservation of matter and of energy*. Both, however, are subject to manifold changes of form: both matter and energy are transformed in the actions and reactions that occur between the various separate masses of matter which embody both. *The laws of transformation* are the laws of the several sciences; and it is the destiny of science ultimately to express the fact of transformation as a series of laws by which each kind of matter and each kind of energy changes into each other kind, always with the assumption that quantity remains unchanged. Thus each law of transformation appears as a particularisation of the general conception of reciprocity between bodies that change each other, but conserve the whole while they change.

Thus prepared with conceptions of such wide-reaching application, we turn to consider the other class of things—the living, growing, organic world of things, that spring into being, grow and die, that are dependent for sustenance on supplies which they appropriate from

the inorganic world, and which, when not overpowered by circumstances, are observed to change themselves in accordance with circumstances, so that the supply may be secured. These living things change in quantity of matter and of energy, as tested by effects on the inorganic world; and they change in form also, by an initiative that proceeds from them and uses the inorganic as its means. Between the organic and inorganic we are prepared to assume provisionally that the quantity of matter and of energy remains unchanged when the one absorbs the other. But the organised body does more than this; it does not simply transform inorganic matter into its own substance; it changes its own form; and though these changes correspond with its circumstances, they are not the action or reaction of its circumstances on it, but the effects of its own reaction to that action and reaction. Life, in its lowest conception, is simply *self-development by the effort* to live under such circumstances as occur.

Such development, however, issues in the production of a being with a manifold inner determination of energy, in addition to the manifold outer determination of surrounding circumstances. It has a character, which is the product of its life history and inwoven with the very effort to live; this character, or organisation, is the means by which it lives. Henceforth, adaptation to circumstances means for it the preservation, not merely of the abstract, but of the characterised, self, by means of circumstances when favourable, and in spite of them when not. This is the beginning of that tragedy in which the inorganic, by its irresponsiveness, destroys

the organic: it is also the successful process in which the organic further develops its form by self-adaptation to the peculiarities of its irresponsive environment, *conserving and yet transforming itself*. In the conservation of its organisation it changes the arrangement of the external world to suit it, and in the transformation of itself it changes its organisation to suit the world. This is development, as well as life.

It is no part of our present business to deduce from this conception of development the demonstrated multiplicity of fact which implies it, or to develop it on the philosophic side into a principle more adequate to the facts, should this be necessary. Dealing with the subject as an example of method, we are concerned only with the fact that this latter process might be necessary, and with the logical method exemplified in it. Let us look below the surface of the actual thought for its logical backbone.

The law of development of life, into higher, or more complex, forms of life, is first arrived at in some provisional shape, either by following the suggestions of observed fact, or by analogy to the law of inorganic change. Then the thinker proceeds to build up his science, by deduction of facts from this law. Presently, he becomes aware of facts that cannot be so explained to his satisfaction. If he be true to truth, he cannot ignore them; yet they will not fit into the universe of discourse which he has been at such pains to construct, and already the evidence that he has amassed for the general truth of his first principle is very weighty. In this strait, he, or his successor, reverts to



closer examination of the first principle itself. Does its truth imply any complementary principle which has been neglected in the deduction? This is a logical inquiry into the consequences of the principle. Or is the conception on which it is based completely expressed in the principle? This is a logical inquiry into the import of a conception. Or, once more, if the conception is not adequate to the facts, what additional conceptions are necessary, and how can they be subsumed, with the original one, under a single conception which is adequate? This is a logical inquiry issuing in a broader conception and the statement of a more general principle.

The first inquiry originates in a challenge as to the accuracy of the scientific construction at its base; the critic objects, whether he be the same person as the maker or not. The second originates in a challenge as to the accuracy of the fundamental judgments about the character of the root-conception. The third originates in a challenge as to the all-embracing nature of that conception itself. With such challenge then, in every case, the critic starts, and he supports it by criticism, destructive so far as it goes. Then the positive activity of thought resumes its work, broadening and strengthening and spreading wider the foundations, so that the truth brought to light by criticism, as well as earlier truth, may be included in the new structure.

And here we may recognise, in this severe and elaborate exercise of thought, the same fundamental process of trial and error, which is implied at least in the formation of an ordinary percept. Here, as there, we have the fetch

of imagination for the purpose of completing an object of attention; but here the object of the fetch is the conception of a universe. Here, as there, we have the superposition of conception on facts, higher and more complex as conception and facts are. And, in both cases alike, there is the shock of incongruity, or the irritation of inadequacy, whence follows the demand for a new and supplementary attempt. Thus there is implied in perception, and in simple acts of thought, the same principle of activity which is elaborated into the logical method best known under the name of *dialectics* when the object of activity is the fundamental basis of science or a science.

Certain sciences there are the subject-matter of which falls more particularly under the dominion of this dialectic method. These are of such a nature that the philosophic inquiry into origin is constantly the central object of interest, because the observed facts to be explained vary in the experience of the individual thinker, as his conception of origin varies. Every science which deals with self-conscious nature, making its own objects of thought and will, are sciences so far peculiar that the agent who thinks and the object thought about are united in one person; the person as agent, therefore, modifies the person as object, while the latter limits the former, the whole, however, being subject to logical law when treated scientifically. For instance, if I, the thinker, respond to the scientific inquiry 'What is the object aimed at in all acts of will?' by the conception of personal happiness, I, thereby, *deliberately* connect that conception with the conception of volition, and tend to *strengthen* my previous

habit of willing with the idea of my own happiness before my mind. For me, henceforth, my direct experience will prove the truth of the hedonistic conception with all its consequences. If the conception be inadequate, I can find this out only by attending to, and exercising my imagination about other people's direct experience, or by looking to history and the opposite inferences it suggests, or by the eruption into consciousness, after an intolerable amount of repression, of some earlier principle of choice. This last, however, would not be likely to happen if the hedonistic conception had been before the mind from childhood.

It will be plain from even this slight consideration of the example, that the whole group of moral sciences, dealing with the laws of human nature, and especially with the laws of those ends which humanity, both individually and in society, desires and purposes to attain, is subject to a very peculiar difficulty just at the stage of philosophic inquiry. Hence, they tend to throw their whole force into this stage, and become philosophies primarily rather than sciences. Every philosophy, however, finds its warrant in a science which proves, or tends to prove, it; and the construction of that science constitutes its positive stage of development. But in this case, there is a constant tendency to change of elementary facts as a consequence of the scientific study, besides such tendencies to change as inhere in a developing object like the mind of man; and there is also special liability to defect of criticism, as already suggested. Thus the *negative effort* of criticism is specially needed, with the sequent work of new concep-

tions and reconstruction; so the dialectical method is specially applicable to these moral sciences, and is chiefly known in connection with them.

However, it is evident, and more evident than ever here, that dialectic is apt to become a battle between thinkers of rival schools, advance being made from stage to stage, not by the progress of individual minds from less to more adequate conceptions, but by the advance of each generation of minds on its predecessor. The second thinker of the first school has studied the first thinker of the second school, and returns to the defence armed with new arguments, informed, though perhaps he knows it not, by new ideas. So thought goes on, the thought continuous but the thinkers unconscious of its continuity; and progress is like that of a drunken man who makes his way home by a zigzag path, first knocking up against one wall of the road, and then against the other. Not the length of the road, indeed, but its breadth, is the trouble of philosophic inquiry, so long as thinking is unconscious of its own continuity in direction throughout.

But as the consciousness of continuity develops in thinkers, a new conception, not so much of logical method as of its employment, develops also. The single thinker can realise continuity by making himself the thinker of all that has been thought. With patient, docile, and humble mind, he travels through the whole historical development of thought on his subject. Thus he makes himself fully conscious of its method, as one every step of which can be taken by him, the single thinker; and, further, he gains a general sense of the direction in

which the object, by universal consent, is supposed to lie ; to which gains may be added the moral gain of respect for oppositions in thought. Our growing consciousness of the value of this *historical method* in dealing more especially with subjects of social science is a good sign for the future of these.

Moreover, the historical inquiry is itself a part of that inquiry into the ideas of other persons, and groups of persons, under varying circumstances, which constitutes inquiry into the additional facts of the subject when these are facts not of unconscious but of self-conscious nature.<sup>1</sup> The philosophic disposition to dialectic inquiry is thus analogous to the natural science student's disposition to look facts clearly in the face, not yielding to first impressions, or the temptation hastily to construct a one-sided theory on ill-considered premises. The reproach of one-sidedness, however, is manifestly directed with most appropriateness against the besetting sin of thinkers on the moral sciences. And the warning against one-sidedness in the popular discussion of these subjects is very pressing just now, when the deductive and inductive sciences are studied by so many and the dialectical or historical sciences by so few, and with so little consciousness of method.

Still, it is only part of the general warning against the sacrifice of truth to consistency. Reality without, as well as within, is always disturbing with fresh intrusions our comfortable little universes of discourse, and so forcing us to reconstruct at least, and generally

<sup>1</sup> The results of this inquiry are always subject to personal verification.

to re-inquire into a suitable origin for the altered whole of fact. The later elements of a gradually perceived object, the new facts of inductive science, the fresh revelations which the mind makes to itself of itself or other minds—these each stand in the same relation to each of the systems of similar elements which they disturb.

Truth is to be desired in its wholeness, and inconsistency to be hated at the same time. These two conditions, though conceived as culminating at the same point when the whole of knowledge shall appear as a single piece of unbroken science, are not seldom in conflict while knowledge is broken into many sciences. Truth is sacrificed to consistency when a rampart is built around our universe of discourse, and no more elements allowed to enter. The universe of discourse never does include the whole of truth ; it is ever expanding to include new truth ; though ever organising itself anew as logical consistency demands.

For neither must consistency be sacrificed to truth. While it is needful to keep a mind open for new truth, aware of itself as not yet fully adequate to all that is true, and liable to take as false or unmeaning that to which it is not adequate, it is no less wrong to be carelessly content with a heaped up *mêlée* of piecemeal facts, which perchance we may dignify by the title of our knowledge.

Thus the sound mind is open equally to the reception of new facts and new ideas ; and it is patient even with self-contradiction, though never content. For it, the universe of discourse constantly enlarges its boundaries,

re-organises its content, and thus infinitely develops itself. It has an open ear for seeming nonsense as well as seeming truth, and a critical eye to detect the truth or error in either. Assimilating the new by means of the old, it reduces all to a connected system, in which is foreshadowed the perfect unity of a complete and universal experience—perfect in unity because complete, and complete because universal.

## CHAPTER VII.

## THE SOUND INTELLECT SET ON TRUTH.

WE are now in a position to summarise results, by describing in brief detail the essential characteristics of the sound intellect, production of which is one of the two ends before the mind of the educator. We have followed the ideal process of intellectual development, from its beginnings in perception to its culmination in an all-embracing rationality; and we have traced in the process throughout a double characteristic. On the one hand, intellectual content increases, by the appropriation of impressions that present themselves in consciousness, as material to be woven into an intelligible context with all that is already there. On the other hand, these impressions are woven into that context,—assimilated by the organised whole of consciousness, which necessarily re-organises itself in assimilating them, though this may be done with greater or less efficiency. That each of these results depends on the other is evident enough, but there is a distinction between them which is nevertheless important. Consciousness takes up new material, and completes itself by doing so; but it may do so without that perfect assimilation of the same which

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brings the whole into a new unity, larger than before. Again, consciousness may organise itself very highly but neglect to appropriate new material, through habits of inattention—say to sensory presentations—or through habits of self-concentration which are no less common.

It is true that the perfection of the acquisitive disposition implies the perfection of the allied, but contrasted, disposition to organise all past and present acquisitions; and the converse proposition is equally true. But the contrast of dispositions and abilities holds nevertheless, and offers ground for the first distinction of intellectual excellences in the whole of intellectual excellence. The two thus distinguished may be called dispositions of organisation and acquisition, or we may look upon them as tendencies to unity and to completeness; or, to use more psychological and concrete language we may distinguish them as the qualities of activity and impressionability respectively. In perception, for example, the distinction obtains between vividness and breadth of impression, on the one hand, and the intellectual act, on the other hand, by which the impression is placed in a particular represented context and interpreted as so and so. And experience shows that these two psychological abilities of reception and apperception co-exist in different persons in a ratio that is by no means constant.<sup>1</sup> One child may suffer from defect of apperception while

<sup>1</sup> These facts can be well illustrated by the simple experiment of taking a number of people into a room and requiring them to describe it afterwards, when it will become very apparent that some of those who receive most impressions perceive the corresponding objects very imperfectly. In a paper read before the Anthropometric Society I have given an account of such experiments.

reception is good, and another may suffer from a similar defect of the opposite kind. Good education should tend to correct both defects.

This couple of ability being efficient throughout the whole range of intellectual production, we have, as the primary pair of intellectual excellences :—

(i.) Intellectual *activity*, marking the readiness with which experience reproduces itself for the assimilation of more experience, and the promptness of the assimilation ;

(ii.) Intellectual *docility*, or openness of mind, marking the readiness with which attention is turned to new impressions of sense, and suggestions of all kinds, while engaged with the enterprises of reason no less than when occupied with the interpretations of sense-perception.

It is by his high endowment with this dual excellence that the man of massive, but not specially scientific, intellect is characterised. Something more is needed to make the scientific intellect of the genuine thinker—a quality that belongs to all thinkers, more or less, though sometimes in much less than its due proportion. To the minds that are active and impressionable merely, works of the imagination essentially belong, and these may be works of unbridled fancy, out of all relation to the claims of consistency and truth. The truth-pursuing intellect puts the bridle on the wild horse of fancy, and is distinguished by the unerring certainty with which it rejects all such products of activity as are inconsistent, either with themselves, or with the conceptions of truth by the side of which they momentarily co-exist in one mind. Now this certainty with which one mind rejects the illogical

more than another, does not, as I think we have seen, depend on any difference between minds such that one actually accepts the inconsistent while another does not. All minds alike reject that which they finally perceive to violate the logical laws of consistency. But all are not equally faithful to the means by which obscured inconsistencies are perceived. The unity which is forced on them they accept; but they lack impulse to go in quest of unity: they are deficient in the just fear that unwittingly they may have violated unity, or on the other hand neglected to notice some presented truth; they accept what comes into their minds without question, without criticism. And so the third intellectual excellence, without which the first two fail to make for truth, is faithfulness to truth as consistent knowledge and the whole of knowledge. This is based mainly, no doubt, on a strong general sense of the wholeness of individual experience and therefore of things; and, issuing thus from a well-sustained psychological unity, it shows itself in a tendency to logically directed as well as other forms of self-control. This logical self-control takes on more especially the form of criticism, in which the particular object is, as it were, brought before a tribunal, representing, or meant to represent, the whole of mind, and deliberately judged in careful detail. The unfaithful mind, whether perverse, or deficient in general sense of itself—often called common sense—or deficient in the volitional quality of self-control, can judge as correctly as the faithful mind, but fails to bring its criminal acts before the judgment of the tribunal. It fails to perform that police-function of thought which makes criticism pos-

sible, and the readiness to perform which is, when conscious of itself, the critical faculty.

The faithful or sound mind may, however, and frequently does, reject products without any such deliberate criticism. It throws off falsehood of the more apparent kind while falsehood is a tendency only. Indeed we might distinguish the *sound* mind more especially, as the mind which kills off lies and fallacies before they are born into consciousness, and understand by faithfulness the allied and more difficult virtue which destroys untruth when it has a footing, and perhaps a footing hard to shake. It is evident that the two qualities belong to different stages of the same development, and that the mind which has been faithful, therefore, becomes sound in proportion to its faithfulness, while the sound mind is necessarily faithful unless it is tending to degenerate. And here is a practical conclusion for the educator. Be faithful to Truth according to your lights, and presently she will take up her abode with you. Lead your pupils, therefore, to criticise their products of thought in the interests of truth, and presently those products will form themselves truthfully. A critical habit forming is a logical tendency taking root.

Activity and docility, as such, may produce sham knowledge rather than true, works of fancy rather than works of genuine thought. The sound mind distinguishes sharply between these two. On the one hand, it *attends*, in the survey of its objects, to the distinction between the partly given or sense-presented fact and the wholly re-presented or fictitious. On the other hand, it *attends* to the fact whether the logical requirement of

identity in identified points is fulfilled or not. A sound mind is sober and preserves itself: it does attend. The activity and docility of such a mind are logical, and the third excellence of intellect may, complex as it is, be defined as—

(iii.) Steady continuous attention to the inherent distinction between truth and falsehood, such as would, in a stage of advanced self-consciousness, imply both a constant pervading sense of the unity of thought, and a clear perception of the boundaries at which the universe of thought merges in reality.

We have already seen how this quality of soundness depends for its cultivation on a habit of faithfulness, though this by no means implies that, through the generations, all minds were faithful before they were sound. No man can be faithful except to an object, and the object must be present in some sense to his consciousness before he is consciously faithful to it. Logical faithfulness, then, in that full sense of the word which implies consciousness of its own object, follows the distinct rise in consciousness of the logical object—the idea of the truth. That the sound mind tends towards the production of this idea is doubtless evident. Instinctively it has always practised the methods of direct truth-production. It awaits only that coming to consciousness of itself, which begins in reflection on its own ways as observed, and culminates in a knowledge of the objects towards which those ways are directed, with all the outburst of glad feeling and energetic will which the intellectual discovery of such objects implies. The sound mind, and all minds in so far as they are

sound, coming to consciousness of this object which they are practically pursuing, find in themselves the idea of truth, defined, not in full but simply, as the idea towards the further development of which all sound intellectual activity is directed, and consisting now in such knowledge as this activity has hitherto brought together. Henceforth, truth is an object of conscious pursuit, a practical idea in the pursuit and contemplation of which the mind finds enthusiastic satisfaction.

Intellectual progress has reached a stage of higher efficiency when truth thus becomes a direct motive to the will. Good primary intellectual qualities, valuable though they be, are probably of little account in comparison with the leading intellectual virtue of which we have now come in sight, and which we may call—

(iv.) The *will to know*, or the love of truth as shown practically in its voluntary pursuit.

The cultivation of this wise will presents probably the most important of all the problems in intellectual education. The effect of the teacher's own enthusiasm for truth is well known. At all ages of studentship a fellow-enthusiast has some effect; but probably there is a critical age at which this effect is greatest. The birth of the idea of truth being naturally connected with the clear development of self-consciousness, it is likely that a great deal depends on the way in which knowledge is presenting itself to a child's mind just at that variable age, from twelve or thirteen years onwards, when self-consciousness begins to manifest itself strongly. If truth be identified with knowledge, and knowledge with my pursuits, when I begin to question my consciousness

about myself and my pursuits, then truth presents herself to me as my object with all the attractiveness of a first love, and I reap all the advantages henceforth of having loved her always. We may look to the choice of educational objects, and their mode of presentation, at this age specially, for an increase, much to be desired, in the world's stock of truth-loving souls.

Without the will to know, logical acquisitiveness begins and ends in gratification of desire, logical activity in pleasant exercise. So soon as either becomes laborious, work ceases, or becomes mechanical—governed by a law of forced repetition or routine; in either case progress in knowledge ceases, and so does fresh exercise and the consequent adaptation of faculty. We are sufficiently familiar with the law of exercise to know that the maximum of improvement is gained at some point after voluntary effort has begun. Hence, though the better intellect, like the better practical activity, is the one that does a given quantity of work with the minimum effort, the condition of becoming better is that effort—voluntary effort—should be made. The will to know is the normal stimulus to effort in the case before us. By it, the intellectual activities are urged to more or less laborious exercise, and *habits of effort* are duly formed, leaving the will free for other work.

Thus, to the natural activity of intellect is added the quality of intellectual strenuousness, the habit of un-resting labour for the sake of knowledge. Activity is absorbed into purpose, and purpose increases no less than it directs activity. Thought labours for its end, and, since that end is truth, the labour is logical; for strenu-

ousness of mind attaches, not to the works of imagination so appropriately as to the works of knowledge. We recognise this distinction when we find fault with a poem, or the ornamental part of a speech, for showing marks of labour—for not presenting the appearance of spontaneous flow ; while, on the other hand, we value the argument or truth-directed part of the same speech all the more, if it presents evidence of careful well-considered thought, of strenuous effort on the part of the speaker to get at truth. Indeed, the source of a great orator's influence lies largely in the impression he gives of labouring now, and of having laboured always, in the pursuit of truth. Not cleverness, nor the gift of speech, makes eloquence, but the manifestation of a mind striving, and successfully striving, to find the light, and, having found it, to make it shine for others also. And, on the other hand, that graceful quality in oratory which does not indeed inspire, but excites keen delight, consists just in a corresponding absence of manifest effort in all those parts of a speech which are not directed to the elucidation of argument and the exposition of fact. An evidently prepared sally of humour fails more especially to produce the psychological effect of humour, and may even irritate some hearers by suggestion of deficiency in the more important truth-loving quality. It would not probably be too much to say that all first-rate humour is strictly extempore—applied, that is, to the subject under consideration at the very moment of its utterance. A speaker is most humorous when the audience can see his jokes coming upon him, without purpose of his, as he goes along.



This digression will not involve waste of time if it illustrates the significance of the distinction between intellectual activity and the habit of logical labour. This last is generally a sign of the love of truth whence it springs; though it might in exceptional cases be a habit only, that original source having been dried up. In any case, it impels a man to construct an argument, when he argues, without any holes in it, and, in general, to found all conclusions, practical or speculative, on processes of reason. This, however, is not the only truth-finding habit which is developed by the pursuit of truth. The mind which is active needs also to be docile; so, too, the mind which is logically laborious needs also to be laborious in the acquisition of that new material for knowledge, which must be absorbed in order that knowledge may become co-extensive with truth as its whole. And this labour of acquisition involves the difficult work of much patient waiting on Nature till she reveals herself in answer to our inquiries. Unresting labour of inquiry, and unceasing patience in waiting for results, and determined perseverance in renewing inquiry—all these are necessary in order that the complement of knowledge, which with knowledge makes up truth, should be won by the thinker for knowledge.

Thus, on the higher stage of intellectual life, when intellect is inspired by the love and directed by the purpose of truth, the standard person is characterised by the possession of two complementary intellectual virtues:—

- (i). *Logical laboriousness* in the work of reason.
- (ii). *Persevering inquiry* into given facts.

Of these two, as it seems to me, the second is the rarer and the more difficult; and that it has been slower of development in the history of the race is shown by the greater antiquity of demonstrative, as compared with experimental, science, while latest of all in development, though foremost in interest and first attempted, stand the sciences whose method is that of dialectic inquiry.

On the lower plane of undirected intellect we saw that activity and docility need to be complemented by sound sense. So, too, on this higher plane, *labour and inquiry need to be complemented by criticism*. Sound sense, as we saw, implies the possibility of the love of truth, and the love of truth, it is manifest, implies a general willingness to revise the results of labour and of inquiry, with a view to the detection of error. The exercise of this general willingness issues in the formation of a revising or critical habit, which is perhaps the most characteristic mark of a truth-producing mind. By labour knowledge is created, by inquiry it is extended, but by criticism it is tested and guaranteed as logical and sound.

Yet it is in the case of the critical habit, more especially, that we see exemplified the tendency of intellectual habits, already noted, to gain an independent existence of their own apart from their source in the love of truth. In a sense, indeed, they have that independence originally, in consequence of their derivation from primordial and non-voluntary intellectual excellences. We are all familiar with the critical mind in its purely negative attitude of finding fault with results already attained; and, as purely negative al-

though perfectly correct, it deserves the freely given condemnation of the plain man, who rightly looks for a positive purpose behind the negative judgment, and in pure criticism finds it not. The plain man is right when he condemns as a whole the person who displays himself as a mere critic; but the mere criticism may be perfectly right and desirable, nevertheless, as criticism. This is properly negative in itself, though it marks a degeneracy of human nature when it is conducted in a purely negative frame of mind. In the concrete, the good critic is the person who searches out error as a means to the establishment of truth, by a re-inquiry after truth. The business of education is with the soundness of the critic rather than with the cogency of his criticism; and so the teacher will take special pains to secure that the growth of the critical faculty in his pupils shall be the outcome, not of mere sharpness, or still less vanity, but of genuine desire to win truth. Nor is it difficult to distinguish the truth-loving from the less worthy critic, for the former unmistakably begins at home, in self-criticism rather than in the criticism of others. I must love truth very dearly for myself before I can care for her in others greatly; and he must be either a very self-confident person who ventures on her behalf to criticise the works of others before he has with greater care criticised his own, or a person who cares more for their truth than for his own, which is absurd. The teacher, then, as it seems to me, should be careful to direct critical tendencies homewards, without repressing them actually in any direction, and should, so far as possible, also secure that every critical

effort shall be followed by the constructive effort to which it is properly a preliminary. With these provisos, it may be set down that the third intellectual virtue on the higher plane is—

(iii.) A *critical habit*, or tendency to test all results by the criterion of sound sense and logical consistency, with a view to the acquisition of 'nothing but the truth.'

For all persons more or less, and notably for some, this truth-producing mind in its triple character becomes an object of reflection for itself. The mind reflecting on its ends of action, and finding them intellectually in truth as an object, is in the first stage of intellectual self-consciousness. The mind reflecting on its suitability to these ends—to find truth—is reflecting on its own character, and is in the possession of self-consciousness proper. Into this possession it seems to come most naturally by its growing awareness of itself as critic. In criticism, I reflect on my logical work with a view to its correction and completion; informed by my idea of truth as a whole, I review a part, and it is of this whole as mine, in the full sense of being my creation, that I become conscious when I become intellectually self-conscious. I become aware of myself as the searcher and finder of truth, as the philosopher seeking and as the wise person finding. As such, I am the ideal intellectual self which asserts in knowledge its right to absorb the real intellectual self, I am the self that loves truth and naturally produces it. This ideal self, henceforth, becomes to me, more or less. my object in intellectual work. Just as at an earlier stage I found my object in truth, and loved truth,

so now I find it in wisdom, and love wisdom as the infinite possibility of truth in me. Wisdom for the individual is thus a more highly developed intellectual object than truth, not as opposed to truth, but as containing all the possibilities of it, while the truths which the individual knows can never be more than a part of that whole.

Nevertheless, it would be a fatal error—and the teacher needs beware of it—to aim at wisdom before we aim at truth. Wisdom has, indeed, no existence out of relation to the love of truth; to think that it has is to confuse it with cleverness. Wisdom can become an object only to those who have striven after truth, and become aware of themselves while so striving. The teacher, who has gained the higher plane, must bear in mind the route by which he reached it, when dealing with the learner in an earlier stage of development. To the child, the object of intellectual labour is normally truth, rather than wisdom; and the inversion of this order, in the suggestion of these objects by another mind, is only too likely to result in the falsification of normal growth, in a will that mistakes cultivated cleverness without an object for the wisdom that lives towards truth.

Once truth, or wisdom as including truth, has become an object of the will, its pursuit involves the operation and development of those formal moral virtues which are at once the condition and the result of will-activity for any end. The man who pursues wisdom, like him who pursues goodness, and no less than him, needs faith, humility, fortitude, and self-denial. He

believes that knowledge is, and is possible for him ; and his belief is practical, fulfilling itself: this is intellectual faith. He doubts the full adequacy and accuracy of his results, and, therefore, surveys them critically: this is intellectual humility. He is ready to forego pleasure within, as well as without the intellectual sphere—the pure intellectual delights of indiscriminate apprehension and unbridled fancy: in the use of these pleasures he is not ascetic but he is temperate. He is ready likewise to endure intellectual pain, if need be—the pains of temporary self-contradiction, of doubt, of hope deferred ; he endures as well as wrestles, and—hardest task of all—he can be patient.

Thus intellectual growth implies a basis of moral character ; and thus too the love of truth, the philosophic impulse, is itself a sufficient cause for the production of such character. For the virtues are conditions that make easy the exercise of will for any end ; they are also results of the same exercise.

Given, then, the moral basis, and the skilful educator will guarantee the production, from small beginnings, of sound intellectual character. Given, on the other hand, the love of truth, and the educator need do little more than encourage consistency in its pursuit to produce a moral character fundamentally sound. He may not thus produce a character with all the moral graces, nor one informed by a passionate love of righteousness and humanity, but he *must* thus produce a character with the sound backbone of righteous possibility running through it, though cold if the feelings are slow, and hard if the sympathies are dull.

And in the first class of cases more especially, but in all more or less, his success in furthering growth, and in remedying defect, depends upon his skill in ascertaining at what points in the series of intellectual operations the activity of his patient is, or tends to be, proportionately deficient. To these points he directs more particularly the learner's will, with the immediate object of securing a true result in thought, and the ulterior object of removing deficiency by exercise. For the immediate object the learner most naturally works, and this the educator needs always to remember, while his own mind may be rather bent on the ulterior end.

For, once more let it be said, and always remembered, that *though the aim of education is the wise person, the aim of the wise person for himself is always truth.* To this end of truth the wisdom that he may aim at is itself a means.





CONCLUSION

THE UNITY OF EDUCATIONAL ENDS



## CONCLUSION

At the outset of our inquiry it seemed convenient, as being in accordance with ordinary ideas, to divide the object of inquiry into two parts. Conceiving the end of the educator to be assistance to those educated, in their proper work of making the most and the best of themselves, we saw that this conception of his work implies the idea of a standard character the development of which is the best development. To the study of this standard character in its detailed process of natural production, we then determined to direct our thoughts; and, starting from the basis of the common distinction between will and intellect, we have elaborated, as best we could, our conceptions of the good person and of the wise person in detail. We have found them to be the persons whose minds are set on the supreme objects respectively of universal conduct and universal knowledge, and who are realising these objects. The good man lives *in* duty, *by* moral law, and *for* the moral ideal of humanity. The wise man lives *in* knowledge *by* logical law, and *for* the intellectual ideal of humanity or truth.

A brief review of our conclusions will show that

beneath the duality of educational ends there lies a fundamental unity. Goodness implies and requires wisdom. Wisdom also implies and requires goodness. Both are implied generally in the conception of a life that has become self-conscious—the conception of a being that not only develops but has, as self-conscious, ideas of its own development, and purposes corresponding. Before thought and will is life: the organism lives, by using its environment as means to life, and resisting it as obstacle to life. The dawn of intellect is the beginning of inquiry ‘What is this?’ and the whole movement of personal knowledge follows on this inquiry. In the later stages of that movement the question ‘What am I?’ comes into prominence as one part of the whole inquiry into truth; and interest in this question constitutes self-consciousness proper. But before my thoughts are turned to myself they fall naturally on my actions, as an interesting part of my presented experience. Inquiry into these actions leads to assignment of their causes, in such ideas of their motives as we find it possible logically to form. We form ideas of the ends to the attainment of which actions are directed, and, acting afterwards with these ideas in mind, we act with purpose to attain the ends. These ideas of ends, or practical ideas, develop with our intellectual as well as our practical life; and thus *the growth of knowledge directs the activity of will.*

The work of intellect is the unity of presentation and re-presentation in a whole of perfectly consistent experience. This work it accomplishes for its practical ideas no less than for all others, and the result tends

towards the formation of a single practical idea—the idea of an end for me aimed at in all my acts. All these acts, so far as they subserve my life, are directed to the use of nature as means and her conquest as obstacle, except when they are directed to the modification of myself to improved efficiency. The idea naturally corresponding to such acts is the idea of my freedom. As I seek this end of freedom, and reflect upon it, the conception broadens and deepens, as we have seen, till it includes in my personal end of freedom, not only the possession of universal knowledge for me, but that freedom and therefore that knowledge for all persons. When life becomes self-conscious in the inquiry into the idea of its own ends, it implicitly lays claim to infinite rights in freedom and in truth, and accepts the infinite duty of realising these universally. And this, it would seem, is the fundamental source of all religious aspiration, which takes to itself forms more or less distinct and rational, as the implicit ideas of absolute freedom and truth, of infinite duties and knowledge, become explicit though indefinite, and stand out like a bright background behind the more sombre though beautiful conceptions of the moral consciousness, —conceptions of liberty, obedience to law, knowledge, self-devotion, and responsibility. Self-conscious life must, by its own nature, unite its experience in an ideal of truth, and be intellectual; it must unite its ideas of action in an ideal of personal good, and be moral; it must in its finitude reach towards infinity and be religious. All this it does in its nature as self-consciousness, if it be strong and true; the being that fails may

fail because his energy is low, or his self-consciousness too rudimentary, or because of perverse tendencies which have been developed through generations of such inadequacy.

This, at least, is evident: *the life that is strong and conscious and true enough to produce goodness or wisdom, is strong and true and conscious enough to produce wisdom or goodness*; and each so far implies the other. But each also requires the other in order that it may complete itself. The dependence of goodness on wisdom has been abundantly illustrated in a previous chapter. The good man's claim to freedom, which converts itself into his duty to identify his will with the law of nature and the moral law or ideal law of man, carries him on to the duty of knowing nature and man in order that this identification may be possible. By knowledge, and knowledge only, can he become even obedient to law; and knowledge is, in a deeper sense, essential to the establishment for him of that rational continuity between will in the world and his will which the satisfaction of his moral nature demands. The demand always transcends the possibility of satisfaction, it is true; but this remark applies to the demands of the moral nature taken all round, and the fact of their infinitude does not alter the significance of their direction. The good man looks, therefore, to truth, both of what is and what is meant to be, as expressed in nature and in the mind of man, for content with which to fill up the form of his good deeds; without wisdom his goodness, in difficult cases, is general intention only, not a fact. If it be true

that I fulfil the law of duty by doing and being, or meaning, in every detail, to do and be all that I am meant by nature to do and be, then I need knowledge greatly that I may rightly aim. The *necessary* law of the development of good is the ideal rule of my *voluntary* development of self and assistance in the similar development of others. Therefore I need to know, with the utmost fullness of knowledge that is possible to me, the truth concerning the laws of this necessary development of good; and this knowledge implies a knowledge of all truth, in the natural no less than in the moral world. Thus *goodness depends for its fulfilment on wisdom.*

Truth, and truth only, has power to set man free. By knowledge, we become the theoretical exponents of universal law, and *can* become, by the identification of will with knowledge, the practical exponents of that law, in its higher manifestation as the effect of voluntary human agency. But farther than this we may even go in asserting the unity of moral and intellectual perfection. Knowledge of the truth, not only *can*, but *must* set us free, if it present itself to us in ideas possessing more than a certain minimum of vividness and constancy. A very vivid idea is so vivid because it attracts to itself and absorbs all available energy of attention; for the time it occupies the centre of consciousness, all mental life being organised around it. In such case we might naturally expect, and the facts of common experience verify the expectation, that the energies of will, no less than of thought, organise themselves in relation to the central idea and subserve its

tendency to expand its limits. Thus the idea, once it has mastered consciousness bringing all content into relation to itself, tends, because of the voluntary agency of the mind thus mastered, to go on towards domination of the surrounding world. In simple language, the vivid idea moves the will, and does so in proportion as it possesses for the time the consciousness of the man.

Impulsive persons are those who are easily possessed by their ideas. It does not follow, as so often assumed, that their ideas are dispossessed with equal ease. It does seem to follow that they are persons intellectually characterised by vividness of ideas, this vividness being generally, though not necessarily, given to them through the medium of a rapidly working imagination. Ideas may, however, be vivid, and powerful organisers of consciousness accordingly, not through the medium of imagination, but through that of reason. In that case, an idea organises the whole intellectual content, as a logical and illustrative *context* to itself. Such an idea is as many times more powerful than the corresponding idea which fills imagination, as general truth is more inclusive and permanent than the particular. The person who is impulsive under ideas of this tendency is so because his reason works rapidly; but, since the rate at which intellectual operations are performed is, we can scarcely doubt, equally low or high, relative to the average standard, for all the operations of the same person, the *rapidity* of his rationality is not the characteristic which distinguishes him from other impulsive persons, but his *rationality* itself—the tendency of his



ideas to dilate into abstract context, rather than into pictorial or semi-pictorial context through the medium of imagination.

In either case, the idea may be said for the time to possess the man when his whole present consciousness is in the attitude of bearing upon it. He himself, as it were, has then placed himself behind it, finds his momentary life in it, and if it suggest action he will be moved to act. But mark the difference in the two cases. Imagination combines the *present* consciousness, bringing together into the unity of the dominant idea all that is presented or revived at the instant. It does not combine, as reason, with its symbolism of language, does, the *total* of personal experience. An idea dominating imagination, therefore, is much less secure of permanent sovereignty than the same idea dominating by way of reason. In the former case, the whole man is not behind the idea, but only the part of the man that happens just then to be represented in imaginative consciousness. When that part sinks into obliviscence presently, the idea sinks with it, the impulse dies down; and the self-wise people whose intellects move at a rate that makes the complete organisation of temporary consciousness round an idea impossible to them—these self-wise persons shake their heads over the uselessness of the eager impulse that lives but to die. Suppose, however, that the quick intellect, prone to be possessed by its ideas, be also by inheritance, or cultivation, prone to take these ideas as rational, rather than imaginative, starting points. The fact of rapid organisation, and consequent impulse, would still remain; but the mind

behind the idea would represent so much of the whole man, that changes of consciousness afterwards would but slowly alter the significance attached originally to it. When it has ceased to be at the centre, an idea not very different will have taken its place, and the impulse which attached to it will not die but be transferred to a similar object, undistinguishable from it perhaps in the eyes of spectators. The ready capacity for impulse is, indeed, a good gift, to races or individuals; and not the least part of its goodness lies in the fact that it lays those who possess it open to the charge of inconsistency and want of persistence, so long as their *rational* tendencies are insufficiently developed.

The capacity for impulse is, however, not limited to the impulsive persons who owe, as has been pointed out, their impulsive readiness to their intellectual rapidity.<sup>1</sup> In all persons, an idea of sufficient vividness impels towards actions tending to sustain and expand it, and if that idea operate by way of reason in the organisation of consciousness, its impulsive force is approximately constant both in magnitude and direction, while opportunities and ability for action may vary. Thus our ideas are not merely guides to our acts, but their originators; every idea tends to become strong, and every strong idea to become practical. If we, then, possess the truth, the truth possesses us—our will and act—and we, through its possession of us, are made free. Thus, *truth being possessed, righteousness fulfils itself*.

<sup>1</sup> It should be noted that, throughout, the case of pure emotional or blind impulse is not under consideration.

But how do we come into possession of the truth? It does not impose itself simply on us, we being passive recipients meanwhile. From material which presents itself to us without our agency, in accordance with necessary laws of unity which we cannot, with open eyes, set aside, the structure of knowledge is reared in our minds by the conscious co-operation of our own voluntary effort. Sense-presentations, laws of thought, and personal effort—these are the three factors of knowledge-production; and that the last is not the least important factor is testified by the consciousness of every thinker, and by our widespread faith in the stimulation of the will as a means to the individual acquisition of knowledge. The material we can, to some extent, either take or neglect to take; the laws of unity we may also disregard, by inattention to inconsistent intellectual products; and the natural fund of spontaneous activity, which will carry us some distance, may fail to carry us far enough. Sooner or later, there is a call for the supplementary voluntary effort which we may, and for our object ought to, but need not make. The talents are committed to our care, but we *can* bury them. The opportunity is given, but we need not use it. Law for the regulation of thought is prescribed, which we cannot deny in thinking, but we need not think our subjects out—few people do perhaps. Knowledge is produced by, and in, our minds, and the materials are supplied; but whether we produce or not, lies after a certain point of pleasurable exercise is reached, in the use of the simple resolve, 'I will.' Thus, though knowledge is

necessary, its production in each mind by that mind is voluntary.

Up to a certain point, I operate intellectually, and attend to the products of operation, without conscious effort. When effort becomes necessary, I find myself already with an object of intellectual pursuit, namely the object of knowledge which I am already pursuing. If my conception of that object be narrow, the motive which prompts further effort will be restricted in its application; and in proportion as it is wide the sweep of the motive widens also. The best case is that in which conscious effort begins *after* the conception of the intellectual object has, however vaguely, extended itself to include knowledge of all things; and I believe that children take dimly that wide view of the object more often than we are prone to think. In any case, so soon as the idea of knowledge as an object is present, purpose, or the organisation of effort towards its attainment, is possible.

Then the differences between strength and feebleness of character appear, and are the same in this intellectual as in the moral field. The will that is strenuous in the pursuit of its object as the object of will is a good will, good for truth as it is for morality: and such a will, as we have seen, produces by its exercise, and is sustained by, the formal virtues of faith, humility, fortitude, and self-denial. Since then the pursuit of truth depends on the strenuousness of personal will, it depends on the possession, or gain, by the person who pursues it, of just that substratum of character which constitutes essential capacity for good-

ness, and which guarantees for the future growth of the person that it shall be true and constant to its aim, without bias and without faltering. Thus *moral character subserves and is necessary to the production of intellectual perfection.*

Moreover, it is true, that moral character at its best, the perfection of the virtuous will with full-set resoluteness to fulfil its end, cannot but promote intellectual perfection. The objects of intellect are, generally at least, present with all of us as suggested objects of pursuit. All that is needed is a certain intensification of will, and the whole course of intellectual progress becomes a necessary sequence. Given, therefore, that resoluteness of will which disposes the mind to tighten its grasp on objects of pursuit and keep it tightened, and it follows that the mind so characterised will, within the limits of its capacity and its opportunities, be vigorous and constant in the pursuit of its intellectual aims. In short, just so far as strenuousness conduces to moral, so far it conduces also to intellectual faithfulness. And so, just as to do right we must have faith, to have faith we must be of the sort that does right. Moreover, those who are of that sort will necessarily reap the maximum result of their intellectual abilities and opportunities in truth.

But moral character at its best is more than the formal perfection of the will full-set upon its end. Virtue is not simply faithfulness to *an* end: it is faithfulness to *the* end. Of that end we have been able to form an incomplete but thoroughly serviceable conception, which once again may be briefly characterised.

It is, for each one, the joint liberation of his personal consciousness and the universal consciousness of humanity, by the free identification of all wills in furtherance of those natural, (including moral), ends, which the highest exercise of human intelligence is able to discover. Faithfulness to the end does not, indeed, imply such a general conception of its character as this, in the less reflective faithful ones; but it does imply a series of more or less distinct particular conceptions of a corresponding character, life according to which constitutes the plain man's faithfulness to duty. In doing his duty, the plainest man always recognises the fact that he has some object in view, though he may think that it is no part of his duty to understand the object. If he so regard his object, however, it is clear that duty is, for him, either a mere formal obedience to authoritative rule, or the outcome in true instinct of some mass of events which he has not yet raised into the light of consciousness. Such a man is not faithful to duty in the higher human sense of faithfulness to an ideal which at least he tries to understand; but he does recognise an unknown ideal behind his duty, nevertheless.

And it will be more than clear to those who have gone with me so far that faithfulness to an end—the end of duty—implies, in proportion to its grasp on the character, a constant and faithful effort to understand the end. Human intelligence is indeed the organ of nature for the shaping of her higher ends, and thus duty fails to achieve herself when she omits to lean on thought. This is only the reassertion of the position

already upheld at length, that knowledge of truth is necessary for the accomplishment of duty. Hence it follows that faithfulness to duty carries with it an obligation to seek after truth, than which no obligation can be stronger. *So a mind set on good is already set potentially on truth; it has a need for truth proportionate to its aspiration for good.*

But not for all truth equally, it may be said; and, in a certain practical sense, this is true. The man who wants knowledge as a guide to practice always wants some knowledge more than others, and certain departments of truth lie so far removed from influence on conduct that it is impossible to bring them within range of the practical man's interest; he cannot *feel* moved towards them. Yet it is almost superfluous to point out that no part of the knowledge-field can be, in the long run, irrelevant to practice; and thus, though it is natural and right that the practical man, as practical, should feel most and work best on those portions of the field that most directly affect his practice, he would fail to be that mirror of the universal end which the good man aspires to be, if his heart were quite cold and his intellect quite indifferent to the claims of truth in any department. Enthusiasm for truth in general follows on enthusiasm for good at its highest and most intelligent; though it is none the less true that enthusiasm for truth may and does exist purely on its own account.

Coming down for a moment from the heights to the plains of human development, we may note, as a suggestive educational fact, the keen intellectual in-

terest which, in all persons, attaches to subjects bearing on their practical pursuits, the eagerness with which light is sought when light is needed for the regulation of act. Passing over elementary examples which will readily suggest themselves, consider the intellectual pains which a young debater will take to amass and arrange facts, for the construction of an argument in support of a certain course of action which he believes to be right. His object is practical—the persuasion or conviction of his friends—and in pursuit of it he pursues eagerly the truth of the subject, in all its details, and probably acquires in the end a semi-independent enthusiasm for the knowledge, apart from the practical object for which he uses it. This example suggests the educational use of debating societies, when the subjects debated are such as have real practical interest.

Another and higher kind of example is found in the interest which attaches to the study of statistics and similar unattractive details, when they are needed, not to prove a case, (as in the last example), but to throw light on the current of events as tending to the fulfilment, or frustration, of some social end. Statistics showing the tendencies to change, under our present social organisation, in the standard of comfort of the working classes, the amount of pauperism and crime, the public health, and so on—these are only interesting to most minds because they lead to practical conclusions for the guidance of society. It does not concern us here to inquire whether the inferences founded on such facts are justified by the facts or not. Our concern just now is with the fact that such uninteresting



subject-matter of study becomes interesting, because it has a bearing on practice.

Returning to the main argument, let us review our conclusions, binding them finally into that unity which it has been the object of this chapter to demonstrate as inherent in them. The end of personal development, and therefore of education which ministers to that development, is, implicitly or explicitly, for each individual, a single end. How shall we define it in the last resort?

Let us first be clear as to the form in which we ask the question. Shall we now ask, as we did at the outset, what the end of education is. I think not. Starting with the general understanding that education should be directed to the improvement of the individual, and recognising the oft-forgotten truth, that the individual improves by process of growth rather than of manufacture, we have inquired into the process by which he grows so that every stage may be, in the full sense, an improvement, and the result such practical approximation as is physiologically possible towards human perfection as we can conceive it. Surveying this picture, inadequate though it be, of healthy development, true to its aim and unerring in its use of means, we are constrained to alter the incidence of our question, on the one hand, or to change its form, upon the other. If we ask, under the last alternative, what education is, the answer is not far to seek. Education is the work of encouragement, assistance, and organisation of means, by which other minds can

assist *true* development in the mind undergoing education.

This answer compels us to ask another as the real alternative to the original question. What is true development for the individual? To this question a lengthy answer has been given, which, nevertheless, it is easy to summarise briefly. True development is the development of that mind which is set, throughout, on the attainment, in its world, of those objects which it takes to be right, and on the understanding of that world so that it may be sure of their rightness. In such development it realises freedom and wisdom for itself, and furthers the like realisation by others; but its own characteristic, from first to last, is the double characteristic of resoluteness in the pursuit of its practical objects, and persistence in the attempt more clearly to see them, and with them all facts, in the light of thought. Following up its ends of right-doing and true-knowing, with attention fixed on the ends, and not on the changing self that grows by following them, each personality *becomes*, within the limitations of its original character and circumstances, the best that it can become. This becoming is, to the educator's reflection, the ideal end of development, the end which for each individual the educator has in view, though he can only promote it indirectly as a humble minister, controlling opportunities and fostering impulses. But for the educated, his own best development is not his conscious end, when he develops healthily. That best development is, on the contrary, an effect in him produced by ceaseless endeavours to launch all his energies

on objects outside himself, thus taking himself beyond his present subjective self at each step, and thereby expanding it to the limits of the objectivity on which he launches it. As the objects of a true development take form, they make themselves known under the two heads we have discussed, the service of humanity and the discovery of truth. Later these two are conceived in unity; the service of humanity is conceived as assistance to every and any man in fulfilling the ideal end of true development, by which each becomes the perfectly reasonable human soul reading truth as in the pages of an open book. The discovery of truth on the other hand is conceived as the means by which humanity must be served, if the service is to tend towards true development.

The work of education in ministering towards such development is by no means simple; and it is beset by a certain characteristic danger, which danger increases with the enthusiasm of the educator as such, if he be not already on his guard against it. This danger is that he will spoil his work by drawing the attention of the developing mind, away from its own proper objects, to the educator's object of development, which straightway would degenerate into the much lower object—an unattractive one to all healthy minds—of mere self-culture. Now, it is well that the educator should set himself deliberately to promote the remedy of deficiencies moral or intellectual. Sometimes, it may be well to draw the attention of the educated to these, in order that by deliberate efforts of self-culture they may be cured. But normally such deliberate self-culture is for